WRITING AN EFFECTIVE RESUME

A resume is a brief summary of your education, work experience, and activities.

You may need to write a resume for a career fair, or to submit as part of an application for an internship, job, graduate school or scholarship.

Employers seek candidates with strong written communication skills, so let your resume demonstrate that you know your audience. Your resume should focus on those aspects of your background which are most relevant to your current career objective. It should be easy to read, concise, and accurate. (You can save less relevant details for an interview.)

This packet accompanies our Resume Writing Workshop and includes information on the following topics:

RESUME WRITING RESOURCES

The Co-op Office offers interactive Resume Writing workshops that teach you how to write a resume or improve the one you already have for your engineering internship or job search. The office also has a number of books on resume writing available for your use, including several geared specifically for engineers. Stop by the Co-op Office in 1131 Martin Hall to check out these useful resources. Workshop schedules and signup are available on our web site at http://ter.ps/engrworkshop.

Considering non-engineering opportunities? The University Career Center (3100 Hornbake Library) also sponsors Resume Writing Workshops on a regular basis. See workshop schedules on the Career Center's web page, www.careers.umd.edu or call the University Career Center at (301) 314-7225 to find out when the next one will be held.

GENERAL RESUME GUIDELINES

Keep it short and avoid the fancy resume paper.
Unless you have significant engineering experience, your resume should be on one page. Recruiters prefer resumes to be on regular instead of bond paper to avoid paper jams in copy machines.

Know your audience and follow instructions.
Be conscious of your reader as you choose what to highlight on your resume. Read the job description and application instructions carefully so you know how to submit your resume and what information should be included.

Place relevant information toward the top of your resume.
Sections most relevant to your objective should be in sections at the beginning of your resume, using descriptive headings. Within sections, place the information in reverse chronological order, starting with the most recent experiences listed first.

Emphasize your strengths.
Don't worry if you have limited relevant experience. That's why you're seeking a co-op or internship! But try to show employers what transferable skills you bring through examples. What makes you hard-working, energetic, and enthusiastic?

Be consistent in format and font.
Use bullets, bolding, underlining, or italics in a uniform style.
Use an easily read font such as Times New Roman or Arial (10, 11 or 12 point).
Keep your margins even, between 0.5 and 1 inch.
Submit your resume as a .pdf so formatting is preserved (unless the instructions say otherwise.)

Don't use full sentences.
Write in phrases starting with a capital letter. Do not use first person pronouns: I, mine, my, me, etc. Write out names of organizations, associations or classes instead of using acronyms like UMCP or ENES100.

Use "action" verbs to describe your accomplishments.
Focus on examples that demonstrate your strengths instead of taking up space listing duties or responsibilities. See the *"Action Word List"* and "*Turning Responsibilities into Accomplishments*" in this handout for ideas.

Show don't tell.
Highlight concrete, measurable accomplishments that demonstrate your qualifications. Don't list a bunch of buzzwords for soft skills.

Resume Dos and Don'ts

DO update your resume at least once a year or semester.

DO use section titles in a way that allows you to put the most relevant experiences near the top, while still following reverse-chronological order within each section.

DO proofread before sending

DO have a separate sheet for references instead of putting them on your resume. See the guidelines at the end of this packet.

DO NOT list social security number (except on some federal resumes), marital status, height, weight, or anything else that has no relevance to your qualifications.

DO NOT use multiple font colors or styles, or "cute" bullet points. You don't want the format to distract from the content.

DO NOT include a photo with your resume.

POSSIBLE SECTIONS FOR YOUR RESUME

Use descriptive headings in your resume to draw the reader´s attention to the most relevant sections.
Start by including the following <u>four basic sections</u> on your resume.

Contact Information

Include your legal name, mailing address, phone number with area code, and an email address. It is crucial that this information be accurate and up to date at all times! Do not make it difficult for an employer to reach you; the job might be filled in just a few days. You may also include your personalized [LinkedIn](#) URL here. If you are a U.S. Citizen, you can also mention that in this section.

Education

Starting with your current or most recent institution, include your degree (B.S., M.S., M.Eng), major and expected graduation date (including your co-op semesters), name of university and location (city & state).   For example:

> **<u>EDUCATION</u>**
> *B.S., Aerospace Engineering*   Expected May 2017 (with co-op)
> University of Maryland   College Park, MD
> GPA: 3.15

The EDUCATION section may also include:
- Other colleges you have attended (but generally omit high school after your first semester of college)
- Overall GPA: most employers tell us they want to see this
- Study abroad (institution name and location, dates, relevant course highlights)
- Honors/Awards and course highlights (see below)
- Indication that you're responsible for financing a certain percentage of your college expenses

Skills

List your knowledge of computer languages, computer software, operating systems, etc., here.
Also, if you have drafting or lab skills, are fluent or proficient in foreign languages, or if you have any other work-related skills that may increase your chances of being selected, list them here.
If you have a specialized certification, you can include that here as well.

Experience

Think of your paid jobs, internships, engineering class projects, and significant volunteer jobs. List them in reverse chronological order, with your most recent experiences first. Include the job title, employer, city, state, dates employed, and a succinct description of your accomplishments.

Use **action words** in your description. Avoid the phrases *Responsible for* and *Duties included.* **Be specific** about your accomplishments in terms of dollars, percentages, dates, etc. Think about the skills you acquired in the position. Consider how your work impacted the department or organization. Mention promotions. See the exercise on page 5 to help you effectively describe your accomplishments (not your duties or responsibilities).

To ensure that the most relevant experience appears near the top of your resume and to draw the reader's attention to specific sections, consider separating your experience under headings, such as

TECHNICAL EXPERIENCE	LEADERSHIP EXPERIENCE
ENGINEERING EXPERIENCE	RESEARCH EXPERIENCE
CHEMICAL ENGINEERING EXPERIENCE	WORK EXPERIENCE

Depending upon your experience and the positions/ industries that interest you, you might also include the following information on your resume.

Activities/ Affiliations

Most recruiters say that they seek well-rounded individuals to work in their organizations, so consider highlighting some activities. You can include involvement in

- professional societies
- student organizations, including fraternities, sororities, etc.
- community organizations

If you have held a position with responsibility, be sure to include details such as number of hours invested, projects completed, and any skills you may have developed. Your resume will be greatly enhanced by showing active involvement in extra-curricular activities, so if you are not yet active in these, get involved now.

When deciding what to include, do keep in mind the picture you wish to paint for potential employers. Be sure that the activities you include on your resume highlight your transferable skills and interests that are relevant to the position without setting you up for potential discrimination in the hiring process.

Honors and Awards

This can be a standalone section or a subheading under **EDUCATION**.
You can include the most recent/ relevant/ prestigious merit scholarships, academic awards, and honors, along with dates received.

Course Highlights

It is more effective to describe projects and accomplishments rather than just to list classes. If you do choose to list classes, include only upper level or elective courses that are relevant to the work you would like to do. Use descriptive titles, not course numbers.

What about an Objective?

Most college resumes do not need an objective statement. However, if you are going to use one, be specific. For example:

> **OBJECTIVE**
> To obtain a summer internship in material science engineering with a focus on biomaterials or nanomaterials

Remember to incorporate the industry and preferred type of work you would like to do. All of the subsequent information on your resume should relate to and support your objective as closely as possible. You may also include an objective statement if your interest in the position to which you are applying is not obvious from your past experience.

Publications

If you are seeking research positions, especially in academia, it can be valuable to list peer-reviewed publications and conference proceedings. This is usually less important in applied industry positions.
Follow the guidelines used by faculty in your department if you include a publications section.

TURNING RESPONSIBILITIES INTO ACCOMPLISHMENTS

Each time you add a work, project, leadership or research experience to your resume, you want to make sure that you highlight relevant accomplishments that will show both HR screeners and technical hiring managers that you have what it takes to do the job.

Don't copy and paste the job description that states what you were supposed to do; instead, think about what you actually did or contributed, what tools you used, etc.
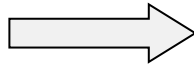
For example, how can improve this example?

ABC Engineering Company	Columbia, MD
Intern	February-May 2014
• Applied knowledge of embedded systems	
• Responsible for writing a report	

Ask yourself the following questions to give depth to the experience on your resume.

QUESTION		SAMPLE ACCOMPLISHMENT
Who?	Who did the work – one individual, two people, or a team?	• Independently wrote a report
What?	What was the subject matter?	• Independently wrote a report on embedded systems
Why?	What was the purpose of your work?	• Independently wrote a report on embedded systems to update senior engineers on latest developments in the field
How?	How did you do this work? What engineering tools or skills did you apply?	• Researched latest developments in embedded systems using technical journals, the Internet, and interviews with engineers
When?	Did you have to work within a certain timeframe?	• Completed report one week ahead of schedule.
How much?	Can you quantify your work?	• Independently researched and wrote a 20-page report on embedded systems.
What happened?	What happened to your work after you completed it?	• Conducted one-hour oral presentation of findings for senior engineers and managers.
Big picture?	Did your work have an overall impact on the organization?	• Report persuaded management to begin using new technology that increased efficiency 15% during the first six months of its implementation.

RESPONSIBILITIES ⟹ **ACCOMPLISHMENTS**

By asking yourself the questions on the previous page, you can expand your descriptions and turn your responsibilities into accomplishment statements.

EXAMPLE 1

Before

> **XYZ Company**, Germantown, MD   June-July 2015
> Student Researcher
> - Duties included research, report-writing and presentations.

After

> **XYZ Company**, Germantown, MD   June-July 2015
> Student Researcher
> - Researched latest developments in embedded systems using technical journals, the Internet, and interviews with engineers.
> - Independently wrote a 20-page report on embedded systems to update senior engineers on latest developments in the field.
> - Conducted one-hour oral presentation of findings for senior engineers and managers.
> - Report persuaded management to begin using new technology which increased efficiency 15% during the first 6 months of its implementation.

EXAMPLE 2

Before

> **Home Depot**, College Park, MD   June 2003 - present
> Department Representative
> - Responsible for helping customers, stocking shelves, and ordering materials.

After

> **Home Depot**, College Park, MD   June 2003 - present
> Department Representative
> - Provided customer assistance and professional advice on home improvement projects.
> - Received increased responsibilities including managing multiple departments, training new employees, and preparing inventory orders.
> - Participated in extensive training in areas of customer service and management.
> - Collaborated with management staff to help make decisions about store policy and staff hiring.

ACTION WORD LIST FOR ACCOMPLISHMENTS

SUPERVISE	CHANGE	RESEARCH/TECHNICAL	COMMUNICATE	OFFICE ACTIVITIES
Administered	Adapted	Analyzed	Advertised	Billed
Controlled	Adjusted	Assembled	Broadcasted	Budgeted
Coordinated	Applied	Assessed	Consulted	Completed
Delegated	Cut	Built	Contracted	Distributed
Demonstrated	Eliminated	Calculated	Explained	Documented
Directed	Implemented	Catalogued	Expressed	Filed
Governed	Improved	Charted	Informed	Kept
Guided	Increased	Collected	Interacted with	Handled
Headed	Innovated	Compared	Interpreted	Illustrated
Led	Installed	Compiled	Interviewed	Obtained
Managed	Introduced	Computed	Instructed	Operated
Monitored	Modified	Constructed	Lectured	Packed
Orchestrated	Proposed	Defined	Marketed	Processed
Oversaw	Reconfigured	Diagnosed	Met with	Produced
Presided	Reconciled	Edited	Negotiated	Purchased
Programmed	Reduced	Engaged	Publicized	Ran
Scheduled	Remodeled	Estimated	Published	Received
	Reorganized	Evaluated	Presented	Saved
ASSIST	Repaired	Examined	Referred	Sold
Accompanied	Restored	Extrapolated	Related	Shipped
Collaborated with	Revamped	Forecasted	Taught	Typed
Dealt with	Revised	Gathered	Trained	
Guided	Stimulated	Identified	Transmitted	**CREATE**
Helped	Transformed	Implemented		Arranged
Notified		Indexed	**EFFICIENCY**	Composed
Performed	**INFLUENCE**	Inspected	Accelerated	Conceived
Served	Advised	Investigated	Applied	Conceptualized
Supported	Convinced	Isolated	Expanded	Designed
	Counseled	Maintained	Expedited	Developed
DECISION	Dispatched	Measured	Facilitated	Devised
Activated	Educated	Observed	Improved	Drafted
Approved	Encouraged	Organized	Integrated	Established
Chose	Guided	Perceived	Maintained	Fabricated
Decided	Indoctrinated	Pinpointed	Reinforced	Formulated
Determined	Innovated	Planned	Reduced	Founded
Enlisted	Motivated	Prepared	Streamlined	Generated
Hired	Negotiated	Projected		Implemented
Ordered	Orchestrated	Recorded	**ACHIEVE**	Initiated
Recruited	Persuaded	Researched	Attained	Invented
Resolved	Promoted	Reviewed	Completed	Launched
Selected	Recommended	Screened	Effected	Made
Specified	Referred	Solved	Enlarged	Opened
	Stimulated	Surveyed	Exceeded	Originated
SHOW	Suggested	Synthesized	Mastered	Produced
Conducted	Supported	Tested	Participated in	Set up
Demonstrated		Traced	Produced	Structured
Exhibited		Updated	Provided	Wrote
Illustrated			Succeeded	
Performed			Won	
Proved				
Represented				

ONLINE RESUMES AND JOB APPLICATIONS

An increasing number of employers, including the federal government, require all job candidates to complete an online application at the employer's website. Online applications allow employers to efficiently advertise positions, accept applications, and track candidates through the application and hiring process. While online applications can feel like a "black hole," they are often the best way to get your resume in the right hands, if you put in the time and effort to do them well.

Online applications may include a resume builder that allows you to enter information about your education, work experience, and skills into specific fields or you may be asked to upload a resume or copy and paste the text of your resume into a text box.

ONLINE RESUME FORMAT

The primary difference between a standard resume and an online resume is the format. Special formatting does not translate well when pasted into an electronic application.

For that reason, avoid the following formatting in online resumes:
- **Bold**, *italicized*, or underlined text
- Bullets or special symbols (•, ➤, etc.)
- Tabs or columns
- Horizontal and vertical lines
- Tables

Look carefully through each online resume you submit; make sure that it is as legible and reader-friendly as it can be. Remember, your electronic resume may be scanned by software AND read by a human being.

DO	DON'T
University of Maryland College Park, MD B.S., Civil Engineering Expected May 2017 GPA: 3.1	University of Maryland College Park, MD ☐ B.S., Civil Engineering ☐ Expected May 2017 ☐ GPA: 3.1 ____

ADDITIONAL TIPS FOR ONLINE APPLICATIONS

- **Incorporate keywords.** Hiring managers will often use a keyword search to find qualified candidates in their database. Read the job description carefully, noting key words and phrases, and incorporate those into your resume.
- **Use spell check.** If the online application does not have a spell check feature, paste your text into another document to make sure that you have not overlooked any typos.
- **Follow up.** If you have met a recruiter at a career fair or information session, contact them by email or phone to express your interest and let them know you have completed the online application. Employer contact information is also available in Career4Engineers.

SENDING A RESUME VIA EMAIL

- **PDF your resume.** Sometimes your resume may look different on your computer than the employers'. Downloading a free PDF converter and converting your Microsoft Word resume to a PDF can avoid a formatting mishap when sending the document as an email attachment.

"FEDERALIZING" YOUR PRIVATE SECTOR RESUME

If you are a U.S. citizen interested in applying for internships, Pathways or full time positions for the U.S. Federal Government, you will need to adapt the resume you created using the guidelines in this handout in order to meet the government's specific requirements.

HOW IS A FEDERAL RESUME DIFFERENT FROM A PRIVATE SECTOR RESUME?

- A federal resume is very specific to a particular job opening, and requires much more information that is not needed (or that might be in a cover letter) in the private sector.
- It is generally 2-3 pages in length, but can be as many as 5-6 pages, in 11-12 point font.
- Takes into account military experience, past federal experience, and requires more personal information to determine eligibility for positions.
- Your federal resume should include detailed descriptions that focus on projects and achievements and incorporate keywords from the vacancy announcements

HOW DO I CREATE A FEDERAL RESUME?

- When you create an account at http://USAjobs.gov, you are given the option to upload or build a resume. *We highly recommend using the Resume Builder.*
- Give yourself plenty of time (3-4 hours) to create your first (template) resume.
- Before you start the resume builder, prepare a copy of your private sector resume that includes the information you will need to add:
  - **Work Experience** –Employer name, mailing address, your job title, dates of employment, salary, and detailed duties and accomplishments (up to 5,000 characters for that last box, so be detailed).
  - **Education** – School name, location, major/ minor, degree seeking or awarded, credits completed, honors awarded upon graduation; relevant coursework, licensures or certifications (up to 2,000 characters). If requested or relevant to the position, you can include high school information.
  - **References** – You may add up to 5 references. Name, Employer, Job Title, Phone and Email. Indicate whether the person is a personal or professional reference.
  - **Job Related Training** – List titles and completion dates of training courses you've taken (besides the coursework you listed in Education) that are relevant to the position for which you are applying.
  - **Language Skills** – Indicate proficiency level for speaking, reading, and writing.
  - **Organization/ Affiliation** – List organization name and your role or affiliation if it is relevant to the position. May include volunteer work. No room for details here.
  - **Professional Publications** – academic or industry journal publications, conference proceedings, etc.
  - **Additional Information** – This is where you add other information relevant to the position that did not fit under other categories, such as honors, awards, leadership activities, skills (such as computer software proficiency or typing speed) or any other information requested by a specific job announcement. You have 20,000 characters for this section.
- Paste the information into the resume builder.
- Adapt your resume to include keywords and achievements that match the job announcement. You can save up to five (5) resumes in your USAJobs account.

RESOURCES FOR FEDERAL RESUME WRITING

http://usajobs.gov
http://gogovernment.org/how_to_apply/write_your_federal_resume/create_your_resume.php
http://www.dhs.gov/tips-writing-federal-resume
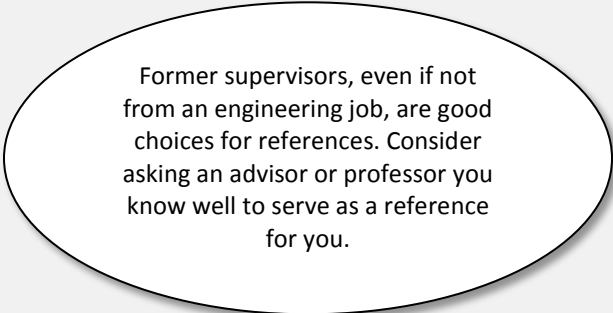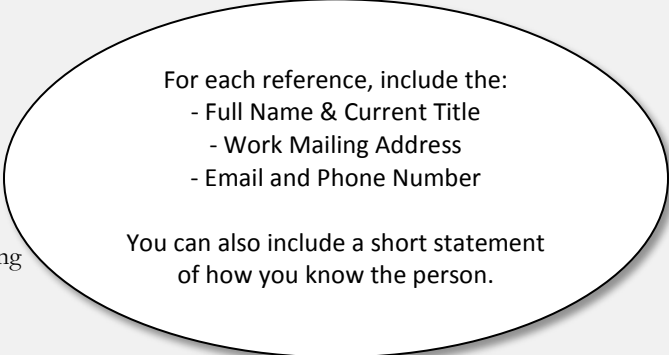http://www.archives.gov/careers/jobs/forms/resume-guide.pdf

REFERENCES

Although not all employers will ask for references as part of the application, it is a good idea to have a typed list of at least three references available. Then if you are asked for references, you will be prepared.

- **Whom to ask:** References may include people such as former supervisors, professors, teaching assistants, or advisors. Choose people who can speak about your skills and abilities. Unless the application specifically asks for a personal reference, do not list a family member or friend as a reference.

- **How to ask:** First, ask the people you'd like to use if they can provide a reference for you if necessary. This way you can ensure that your references know to expect calls, and you can provide them with any details about your background and job search that may assist them. It is a good idea to provide your references with an up-to-date copy of your resume and the job description.

- **Building good references:** Participating in class and attending office hours to discuss the subject matter, rather than to complain about your grade or ask for extra credit, will help you build a positive professional relationship with faculty. You never know, your genuine demonstration of curiosity may even lead to a research assistant opportunity.

SAMPLE REFERENCE SHEET

Jane Doe

1234 Campus Drive • Smalltown, MD 20740 • (123)456-7890 • email@email.com

References

Mr. David Steel
Branch Manager
Chevy Chase Bank
1341 Cherry Hill Road
College Park, MD 20742
(301) 555-0123
dsteel@ccbank.com
(Supervisor at 123 Bank)

Dr. Ellen Setcher
Asst. Professor
Department of Civil Engineering
University of Maryland
1143 Glenn L. Martin Hall
College Park, MD 20742
 (301) 405-1234
esetcher@umd.edu
(Academic Advisor)

Dr. Arthur Strauss
Assistant Professor
Department of Civil Engineering
University of Maryland
1156 Glenn L. Martin Hall
College Park, MD 20742
 (301) 405-4321
astrauss@umd.edu

Former supervisors, even if not from an engineering job, are good choices for references. Consider asking an advisor or professor you know well to serve as a reference for you.

For each reference, include the:
- Full Name & Current Title
- Work Mailing Address
- Email and Phone Number

You can also include a short statement of how you know the person.

Amaya A. Freshman

387 Turtle Avenue, College Park, MD 20742
student@terpmail.umd.edu ● (410) 123 - 4567

EDUCATION

University of Maryland, College Park, MD   GPA 3.0
B.S., Mechanical Engineering   Expected May 2020
FLEXUS: Women in Engineering Living and Learning Community   Expected Citation May 2018

RELEVANT PROJECTS

Over Sand Vehicle Project, Structures Subteam Leader   Sept. 2016 – Present
University of Maryland, College Park, MD
- Collaborate with a group of 10 students to design, build, and test an over sand vehicle on a budget of $400 and a deadline of 3 months
- Lead the structure sub team to build the structure and shell of the over sand vehicle within size and weight specifications
- Individually create a full technical drawing of over sand vehicle and its components on PTC Creo Parametric

Project Lead the Way (PLTW)   Sept. 2014 – May 2016
Severna Park High School, Severna Park, MD
Program that provides rigorous and innovative engineering education curriculum
     Light Sensor Marble Sorter Project, Team Leader   Sept. 2015 – May 2016
- Led a team of 3 students to design and construct a marble sorting device with Lego design parts
- Designed a computer program to enable the machine to run and sort marbles
- Machine successfully sorted 30 marbles of 4 different colors into different areas according to color

     Puzzle Cube Project, CAD Subteam Leader   Sept. 2014 – May 2015
- Designed and constructed a wooden puzzle cube made up of 8 pieces
- Used hand drawn technical drawings and CAD programs to design and plan puzzle before construction
- Puzzle was given a "challenging" level of difficulty and was not able to be solved in less than 6 minutes

ACTIVITIES

Terrapin Theatre Troupe, Member   Sept. 2016 – Present
- Sing and dance in on-campus theatre troupe that puts on 2 shows per semester

The UMD Treblemakers, Member   Sept. 2016 – Present
- Sing in an all-female a cappella group on campus

National Honor Society, Treasurer   Sept. 2015 – May 2016
- Organized fundraisers and maintained funds for the organization
- Managed the volunteers and food preparation of the concession stand at the Navy Football Stadium

SOFTWARE SKILLS

PTC Creo Parametric, MATLAB, Microsoft Word, Excel, PowerPoint

Patrick Freshman

1234 Campus Drive, Davidsonville, MD 21031
(410) 410-4104   umdterps@gmail.com
www.linkedin.com/in/pfreshman

Objective	To obtain a summer internship in Material Science Engineering with a focus in nanomaterials.

Education	**University of Maryland**	College Park, MD
	BS, Materials Science and Engineering	Expected May 2020
	GPA: 4.0	

Honors	University of Maryland Honors Program	Sept. 2016–May 2020
	Department of Materials Science Scholarship	Sept. 2016–May 2017
	MD State Scholarship for Academic Excellence	Sept. 2016

Technical Experience	**Engineering Design Project**	College Park, MD
	Over Sand Vehicle Sub-Group Leader	Sept.–Dec. 2016

- Managed a team of 3 students to work within project guidelines and timeframe to design, build, and test an over sand vehicle
- Programmed OSV to successfully navigate within 250 mm of the edge of water pool, detect the water source, and transmit its temperature
- Determined power requirements of design and chose proper battery
- Designed and constructed circuitry for vehicle
- Created Pro-Engineer design drawings
- Wrote and presented a 25 page design report
- Successfully navigated the course and received an A on the project

Affiliations	**National Society of Collegiate Scholars**	Sept. 2016–Present
	The Minerals, Metals, and Materials Society	Sept. 2016–Present

Skills	**Applications:**	Creo Parametric, MatLab, Arduino
		Microsoft Word, Excel, PowerPoint
	Languages:	Spanish (Conversant)

Work Experience	**Lighthouse Pools Management, Inc.**	Hyattsville, MD
	Pool Operator	June–Aug. 2015–2016

- Mediated disputes arising between workers, delegated assignments to other lifeguards and created weekly work schedule

Lifeguard   June–Aug. 2013–2014
- Promoted health and safety of pool patrons through enforcement of rules and maintenance of pool chemistry within the guidelines set by the county

Activities	**University of Maryland Repertoire Orchestra**	Sept. 2016–Present

- Practice and perform classical and modern music playing the String Bass

KEITH FRATERNITY

28 Terrapin Dr., Springfield, IL 21209 • (555) 555-5555 • student@umd.edu

EDUCATION

University of Maryland: A. James Clark School of Engineering   College Park, MD
B.S. Electrical Engineering (3.5 GPA)   Expected May 2019

RESEARCH EXPERIENCE

Honors College: Gemstone Research Program   Citation expected May 2019
- Chosen for rigorous multidisciplinary team four year research program focused on designing, directing, and conducting research into major technological and societal issues.
- As a member of 6 student team GINU, submitted research proposal for a global positioning system and inertial navigation unit to work together to provide walking directions from building to building in an outdoor setting.
- Initiated data collection for global positioning operation and communication protocol.

WORK EXPERIENCE

ITT- Advanced Engineering and Sciences   Bowie, MD
Technical Intern level 4 – Algorithm Team Member   June – Aug. 2016
- Completed the traceability of the engineering analysis for the Spectrum Management Transition Initiative (SMTI) project.
- Aided head engineer of algorithm team on the creation of technical engineering specifications.

Software Unlimited, Inc.   Baltimore, MD
Technician   June – Aug. 2015
- Updated medical software to the latest version of Medical Mastermind, a powerful medical-practice management product, at over three hundred doctor offices.

LEADERSHIP EXPERIENCE

Alpha Sigma Phi, Fraternity   College Park, MD
Philanthropy Chair   May 2016 – Present
- Established a community basketball tournament, which raised over $4000 for the Livestrong Foundation.

Ralph F. Burns Leadership Institute   Wernersville, PA
Participant   Jan. 2016

SKILLS

MATLAB, AutoCAD, MicroStation, Creo Parametric, Robotics Lab, Excel
Exposure to HTML and Java

BEKELE D. PROJECTS

umdstudent@gmail.com • (301) 555-5555
555 Baltimore Road, Small Town, MD 12345

PROFILE

Entry-level engineer focusing on satellite design and control, aerospace structures, thermal system design, or launch vehicle development.

EDUCATION

University of Maryland, A. James Clark School of Engineering **College Park, MD**
B.S., Aerospace Engineering   *GPA: 3.8*   *Expected May 2017*

EXPERIENCE

Supersonic Wedge Model, *Independent Research and Design*   **College Park, MD**
Special Topics in Wind Tunnel Testing, University of Maryland   *Sept. 2016–present*
- Researched, designed, and tested a wedge model for use in a Mach 2.2 wind tunnel.
- Analyzed shockwave patterns produced using a color schlieron system.

Satellite Trajectory Analysis, *Project Team Member*   **College Park, MD**
Space Navigation and Guidance, University of Maryland   *Sept. 2015–Dec. 2015*
- Used telescope observations to plot the trajectory of several satellites.
- Executed coordinate transformations using MATLAB algorithms to determine trajectories.

Burkina Faso Water Project, *Team Member*   **College Park, MD**
Engineers Without Borders, University of Maryland   *Aug. 2014–May 2015*
- Collaborated with a group of students and professional engineers to design a viable water extraction system for a village in Burkina Faso.
- Aided in the design of the water storage tank and water distribution system.

Bridge Design Team, *Project Team Co-Leader*   **College Park, MD**
Statics, University of Maryland   *Jan. 2014–May 2014*
- Led a team of 8 students to design, fabricate, and test a functional prototype of a wooden bridge designed to optimize the strength-to-weight ratio on a 3 week deadline.
- Placed 2nd out of 15 teams for the best strength-to-weight ratio and received an A on the project.

COMPUTER SKILLS

Engineering: AutoCAD, Pro Engineer, Inventor, EES, MATLAB, COMSOL, SolidWorks, FEA experience
Languages: C++, MATLAB
Applications: Microsoft Office, Web Browsers, Adobe Photoshop, Adobe Dreamweaver
Platforms: Windows 7/8/10, iOS, Linux

AFFILIATIONS

American Institute of Aeronautics and Astronautics   *2013-present*

Olivia Transfer

123 Terrapin Way
College Park, MD 20742

otransfer@gmail.com
(112)-345-5555

Education

University of Maryland, College Park, MD
B.S. Civil Engineering

Expected Dec 2018

Montgomery Community College
A.S. Mechanical Engineering (Honors Program)

Cumulative GPA: 3.75
May 2016

Technical Work Experience

Clark Construction—Engineering Intern *San Francisco, CA*   May - Aug 2016
- Developed a database to be used for future bids by collecting, sorting, and analyzing a wide variety of data from previous projects
- Generated Requests for Information of concrete related inquires
- Tracked supplies and financials by keeping inventory of multiple subcontractor deliveries through the utilization of logs

Project Experience

Energy Efficient House Design Project—Team Leader *College Park, MD*   Feb – May 2017
- Designed and constructed a small scale energy efficient house to explore sustainability ideas under a $500 budget on a team of 4
- Individually calculated and investigated size and quantity of solar panels affordable and realistic for the roof
- Presented 20 page design report to board of 6 engineering professors

Boeing 747 Design Project—Team Member *College Park, MD*   Nov 2016
- Designed and updated front and back wheels for a Boeing airplane assembly on PTC Creo as part of a team of seven
- Composed and presented a PowerPoint presentation explaining what the advantages of these updates were

Work Experience

Department of Transportation Services—Student Driver *College Park, MD*   Aug 2016 - present
- Coordinate timely and reliable UM-Shuttle transit service involving over 30 vehicles to the campus community which serves about 2.6 million riders

The Greene Turtle—Wait Staff *Frederick, MD*   May 2013 - Aug 2015
- Provided customers with quality service while working in a fast-paced high pressure environment

Activities and Affiliations

Maryland Club Soccer Team—Team Captain   Sep 2015 - Present
Alpha Omega Epsilon, Women in Engineering Sorority—Sister   Aug 2016 - Present

Skills

Engineering: PTC Creo, SolidWorks, Arduino, SFRAME, FlowMaster, SewerCAD
Other: Microsoft Word, Excel, PowerPoint, Project Professional

Emily K. Quest

1234 Turtles Road, Newark, NJ 07101
862.222.5555 - umdstudent@umd.edu

Objective

To obtain a summer internship in technical consulting related to building and fire safety.

Education

University of Maryland   College Park, MD   Expected May 2018
B.S. Fire Protection Engineering (GPA: 3.63)

Quality Enhancement Systems and Teams (QUEST)   Expected May 2018
Interdisciplinary quality management program that focuses on customer value management, process and product design, problem solving, project management, customer satisfaction, and teamwork.
- Collaborated on a team of 6 students with Unilever in order to establish a Foreign Material Reduction Plan, utilizing several Six Sigma and Lean strategies.

Experience

Naval Research Laboratory, Intern   Washington, DC   May - August 2016
- Conducted research on high-expansion foam as a fire suppressant using a modified, closed cup burner apparatus.
- Determined minimum expansion ratio necessary for flame extinction at specific fuel flow rates and oxygen concentrations.
- Calibrated equipment, and revised and created protocol documentation for lab equipment use.
- Observed and analyzed data from full-scale, low-expansion foam pool fire experiments.

Lego Robotics Camp, Intern   College Park, MD   June - August 2015
- Instructed students on LEGO Mindstorm software and hardware as part of the Center for Minorities in Science and Engineering curriculum in engineering fundamentals for middle and elementary school students.

Digital Management, Inc., Intern   Bethesda, MD   January 2015
- Researched complex U.S. Government IT Services market, and presented a thorough analysis of competition to the company's senior board.

Honors and Awards

Banneker Key Scholar Full, four-year scholarship to the University of Maryland
University of Maryland Honors Program
Salamander Membership Honorary Fire Protection Engineering Society; initiated April 2015

Activities

Society of Fire Protection Engineers   August 2014 - Present
University of Maryland Jewish Muslim Alliance   August 2013 - Present
Mighty Sound of Maryland Marching Band, Pep Band   August 2013 - Present

Computer Skills

Adobe Photoshop, InDesign; LabView; Microsoft Office (Word, Excel, PowerPoint, Publisher)

TERESA M. RESEARCH

2345 Delaware Road, Wilmington, DE 19810

terpstudent@umd.edu • 202.456.7890 • www.linkedin.com/in/tmresearch

OBJECTIVE   An entry-level Mechanical Engineering position with a focus in composite materials and project management

EDUCATION

University of Maryland, College Park, MD	Expected May 2017
Bachelor of Science, Mechanical Engineering	GPA: 3.74
Minor in Project Management	
FE/EIT Certification	August 2016

HONORS & AWARDS

- L-3 Communications Corporate Partner Scholarship   Sept. 2014
- Engineering Honors Program   Sept. 2014 – Present
- The National Society of Collegiate Scholars   May 2014 – Present

ENGINEERING EXPERIENCE

Multiscale Measurements Laboratory   University of Maryland
Undergraduate Research Fellow   May 2016 – Present
- Create multifunctional sandwich composites inspired by Palmetto Wood
- Design composites with a charge-holding foam core to act as batteries

CCM's Application & Technology Transfer Lab   University of Delaware
Research Intern (project funded by NAVAIR)   Jun. 2015 – Aug. 2015
- Interpreted Instron data to present at monthly conference calls
- Manufactured ceramic bullet proof composites for Office of Naval Research
- Performed damage analysis on ballistic testing of various composites

LEADERSHIP EXPERIENCE

Department of Resident Life   University of Maryland
Math Coach   Sept. 2014 – Present

Women in Engineering Program   University of Maryland
Mentor   Sept. – Dec. 2015 & Sept. – Dec. 2016
- Independently organized weekly reports, meetings, and events for first year student mentees

SKILLS

Operating Systems: Macintosh, Windows
Programming: MATLAB, C/C++ (Exposure)
Software: Pro/Engineer, PSpice, AutoCAD, Microsoft Excel, Power Point
Additional: Green Belt in Lean Six Sigma, Finite Element Analysis, Machining

ACTIVITIES

Alpha Omega Epsilon, Professional Engineering Sorority	Sept. 2014 – Present
Intramural Sports (Soccer, Softball, Flag Football)	Sept. 2013 – Present
University Band (Bass Clarinet)	May 2013 – Present

SAM BIOE

8000 Boteler Lane, College Park, MD 20740 • 123-456-7890 • sbioe@terpmail.umd.edu

Education
A. James Clark School of Engineering, University of Maryland   **Expected May 2017**
B.S. Bioengineering   GPA: 3.52
- Dean's List: Spring 2015, Fall 2015, Spring 2016
- **Relevant Classes:** Bioinstrumentation, Biomaterials, Biomechanics, Biosensor Techniques, Computer-Aided Design, Modeling Physiological Systems

Skills
Engineering: CREO Parametric, SolidWorks, Autodesk Inventor, NX 8.5 (exposure), MATLAB, C
Laboratory: Bacterial culture, Stem cell culture, Gel Electrophoresis, FRET, Western Blotting.

Relevant Experience
Scaled Model of Boeing 747-200B   **Jan. 2015**
CAD Team Member   *College Park, MD*
- Modeled scaled replica of the Air Force One model of the Boeing 747-200B in team of six engineers.
- Individually drafted the vertical stabilizer and rudder in CREO Parametric 2.0.
- Compiled 20-page design report with 2D drawings and bill of materials, and flight simulation presentation.

Infant Respiratory Monitor   **Sept. 2012 – Jan. 2015**
Team Leader   *College Park, MD*
- Led a team of five multidisciplinary undergraduate and graduate students to design and prototype an infant respiratory monitor for neonatal care units in developing nations.
- Used CAD to draft the circuit schematics and 3-D print diode enclosure.
- Conceptualized universal user interface and device's foot strap design.
- Composed and presented current results on a poster at Maryland Day 2014.

Model of Magnetic Drug Nanoparticle Therapy in Blood Vessel   **Sept. 2014 – Dec. 2014**
Group Member   *College Park, MD*
- Calculated a non-dimensionalized model of a magnetic drug nanoparticle in blood for a scaled experimental setup, and determined experimental materials by analyzing fluid forces of blood on a particle and blood vessel parameters
- Presented results in a 20-page design report with Force Body Diagrams, and experimental protocol.

Mechanical Analysis of a Knee   **Sept. 2013 – Dec. 2013**
Group Member   *College Park, MD*
- Calculated static and dynamic forces present in a knee before, during, and after kicking a soccer ball.
- Analyzed tendon and muscle data to determine the risk of injury to the ACL, patellar tendon, and quadriceps muscles.
- Individually created Force Body diagrams to demonstrate the direction and magnitude of musculoskeletal forces.

Apoptosis in Acute Myelocytic Leukemia Cells   **Jan. 2013 – May 2013**
Researcher   *College Park, MD*
- Determined the potential of an unknown drug as a cancer treatment by identifying apoptosis in HL60 Leukemia cells.
- Performed Cell Viability dye-Exclusion, Mitochondrial Membrane, Annexin V/Propidium Iodide, and Colorimetric Caspase Activity Assays, as well as Western Blotting to monitor caspase and antibody activity of HL60 cells treated with drug.
- Presented a 20-minute presentation of results with suggestions for further testing methods and treatment potential.

Activities & Affiliations
Alumni Cup, *Bioengineering Team , Rube Goldberg machine competition*   **Feb. 2016**

Engineering World Health – *General Body Secretary, Team Leader* **Sept. 2012 – Present**

Biomedical Engineers Society   **Sept. 2011 – Present**

ANA BIOE-DEVICES

8000 Boteler Lane, College Park, MD 20740 • 123-456-7890 • sbioe@terpmail.umd.edu

Objective

Seeking an entry-level design engineer position for biomedical devices

Education

A. James Clark School of Engineering, University of Maryland, College Park, MD
B.S. Bioengineering   GPA: 3.52   Expected Graduation Date: May 2017
- Courses: Bioinstrumentation, Biomaterials, Biomechanics, Computer-Aided Design, Modeling Physiological Systems

Skills

CREO Parametric, Pro/Engineer, Solidworks, Autodesk Inventor, NX 8.5 (exposure), MATLAB, C programming (exposure), FEA, CAD (exposure), Microsoft Office

Relevant Experience

Scaled Model of Boeing 747-200B   Jan. 2017
CAD Team Member   *College Park, MD*
- Modeled a scaled replica of the Air Force One model of the Boeing 747-200B in a team of six engineers.
- Individually drafted the vertical stabilizer and rudder in CREO Parametric 2.0.
- Compiled a 20-page design report with 2D drawings and bill of materials, and a presentation with flight simulation.

Infant Respiratory Monitor   Sept. 2014 – Jan. 2017
Team Leader   *College Park, MD*
- Led a team of five multidisciplinary undergraduate and graduate students to design and prototype an infant respiratory monitor for neonatal care units in developing nations.
- Drafted the circuit schematics by utilizing hand-drawings and CAD.
- Conceptualized universal user interface and device's foot strap design.

A.J. Drexel Plasma Institute   May 2015 – Jan. 2016
Research Assistant   *Camden, NJ*
- Managed bacterial cultures and executed projects modeling applications of FE-DBD plasma in microbiology sterilization for hand sanitization, spore growth inhibition, and infection prevention post optical surgery.

Mechanical Analysis of a Knee   Sept. 2015 – Dec. 2015
Group Member   *College Park, MD*
- Analyzed tendon and muscle data to determine the risk of injury to the ACL, patellar tendon, and quadriceps muscles.
- Individually created Force Body diagrams to demonstrate the direction and magnitude of musculoskeletal forces.

Activities & Affiliations

Engineering World Health – *General Body Secretary*   Sept. 2014 – Present

ANA BIOE-TISSUE

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Seeking an entry-level research position for tissue engineering

Education

University of Maryland	**Expected Graduation Date: May 2017**
B.S. Bioengineering	GPA: 3.52

Course Highlights: Biomaterials, Biosensor Techniques, Modeling Physiological Systems, Tissue Engineering, Technical Writing

Skills

Bacterial culture, Stem cell culture, Gel Electrophoresis, ELISA, FRET, Western Blotting, MATLAB, Microsoft Office

Relevant Experience

Model of Magnetic Drug Nanoparticle Therapy in Blood Vessel   **Sept. 2016 – Dec. 2016**
Group Member   *College Park, MD*

- Calculated a non-dimensionalized model of a magnetic drug nanoparticle in blood for a scaled experimental setup, determining experimental materials by analyzing fluid forces of blood on a particle and blood vessel parameters.
- Presented results in a 20-page design report with Force Body Diagrams, and experimental protocol.

A.J. Drexel Plasma Institute   **May 2015 – Jan. 2016**
Research Assistant   *Camden, NJ*

- Designed and conducted experiments, with graduate students and independently, utilizing non-thermal and thermal sources of plasma: Floating Electrode Dielectric Barrier Discharge (FE-DBD) and GlidArc Plasmatron.
- Managed bacterial cultures and executed projects modeling applications of FE-DBD plasma in microbiology sterilization for hand sanitization, spore growth inhibition, and infection prevention post optical surgery.
- Completed a poster successfully demonstrating that plasma-treated glycol and water mixtures are effective antibacterial agents that was presented at Drexel Research Day in April 2016.

Apoptosis in Acute Myelocytic Leukemia Cells   **Jan. 2015 – May 2015**
Researcher   *College Park, MD*

- Determined potential of an unknown drug as a cancer treatment by identifying apoptosis in HL60 Leukemia cells.
- Performed Cell Viability dye-Exclusion, Mitochondrial Membrane, Annexin V/Propidium Iodide, and Colorimetric Caspase Activity Assays, as well as Western Blotting to monitor caspase and antibody activity of HL60 cells treated with drug.

SDS-PAGE Protocol   **Jan. 2015 – May 2015**
Team member   *College Park, MD*

- Designed a protocol for the implementation of SDS-Page into an introductory bioengineering lab.

Affiliations

Biomedical Engineers Society   **Sept. 2013 – Present**

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Washington, DC 12312

Caitlyn CompE

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CCompE@gmail.com

SKILLS

C/C++
Ruby
Java
OCaml
Prolog
Verilog
Assembly
(Mips, y86)

SQL
Parse
Firebase
MongoDB

Windows 7/8
iOS
Android
Ubuntu
Linux

Labview
PSpice
ProEngineer

ASSOCIATIONS

Terrapin Hackers
- *President*
Society of Women
Engineers
- *Director of Social
  Events*
Association for Women
in Computing
- *Active Member*

HONORS

ACES: Cybersecurity
Honors Program
Dean's List,
3 Semesters

ACTIVITIES

Professional Harpist
Contemporary Dance

EDUCATION

University of Maryland   GPA: 3.3   College Park, MD
B.S. Computer Engineering   Expected Dec 2016

TECHNICAL EXPERIENCE

Google Inc.   Seattle, WA
Software Development Intern   May - Aug 2016
- Wrote automated Quality Analysis test scripts for study features on website utilizing Selenium and JUnit
- Refactored a large portion of website (3.5 million+ users), migrating logic from client to server, and creating customized views and paging mechanisms to display it
- Added quizzing to the Android application (100k+ downloads), using RESTful web services to generate content and creating customized views and paging mechanisms to display it
- Developed and integrated post-processing compression function reducing storage requirements by 72%

NASA Goddard Space Flight Center   Greenbelt, MD
Software Development Intern   June – Aug 2014, 2015
- Designed Java tools that perform procedures such as remapping, shrinking, and filtering of sensor data collected from the Suomi NPP Satellite, to aid scientific community in analytics of weather information
- Analyzed effectiveness of Hadoop Distributed File System over current file structure, comparing metrics for common operations such as reading, writing, and copying of large data sets
- Presented products and findings at Intern Poster Session to familiarize NASA colleagues and manager

RELEVANT PROJECTS

Hackathons   May 2014, 2015, 2016
- *HackMIT*: Created an Android mobile application that dynamically sets an alarm for the user based on a specified appointment with a time and location
  - Awarded Audience Choice out of 54 total projects
- *BitCamp*: Developed event planner/announcer Android application designed to promote spontaneous events
- *HackMizzou*: Used Kinect to produce dynamic music based on movements of users in front of device

Payper – Web/Android App   August-September 2014
http://challengepost.com/software/prlxysvale
- PennApps Winner of "Most Consumer-Friendly Bitcoin Hack"
- Allows digital currency to be converted into physical bills that can be redeemed through scanning QR codes

Liliana A. Intern

terpstudent@terpmail.umd.edu, (301) 111-1234
School Address: 6223 La Plata Hall, College Park, MD 20742
Permanent Address: 65444 Brookline Way, Centerville, NJ 01208

SEEKING MECHANICAL ENGINEERING INTERNSHIP
Flight and Space Exploration

EDUCATION

University of Maryland	**College Park, MD**
B.S., *Mechanical Engineering* GPA 3.76	Anticipated May 2017

- Barbara J. Dieter Scholarship, A. James Clark School of Engineering — Sep. 2015

TECHNICAL EXPERIENCE

Johns Hopkins University Applied Physics Laboratory	**Laurel, MD**
Intern: Sentiment Extraction – Milton S. Eisenhower Research Center	Jan., June – Aug. 2016

- Researched natural language processing (NLP), specifically information extraction
- Parsed sentences using Stanford typed dependency (SD) representation to extract textual relations
- Developed feature set from tagged sentiment words for input into conditional random field (CRF) model

University of Maryland	**College Park, MD**
Hovercraft Sub-group Leader – Engineering Design	Sept. – Dec. 2014

- Calculated pressure requirements of design and subsequently chose proper levitation device
- Successfully collaborated with team members to prepare and present a formal preliminary and final design report of completed hovercraft model using Pro/Engineer, Microsoft Excel, and Microsoft PowerPoint

LEADERSHIP EXPERIENCE

University of Maryland	**College Park, MD**
Peer Assistant – Engineering Co-op & Career Services Office	Jan. 2016 – present

- Provide advice for undergraduate engineering students on resumes and other job search documents

Society of Women Engineers Annual Conference	**Beach Town, CA**
Presenter – Region E Joint Collegiate and Professional Meeting	Oct. 2015

- Demonstrated new and more efficient blog format created after being elected to position of Regional Collegiate Communications Editor (RCCE)

ACTIVITIES

- Mechanical Engineering Honor Society, Pi Tau Sigma — Jan. 2015 – present
- University of Maryland Terp Runners Club — Sept. 2013 – present

COMPUTER SKILLS

Applications: Pro/Engineer, MATLAB, Microsoft Office, Access, Excel

Janel Career-Changer

123 Terrapin Terrace, College Park, MD 20742
301.555.5000 ● student@umd.edu

ENTRY-LEVEL CIVIL ENGINEER

Civil Engineer with a Bachelor's Degree (BSCE) and computer-aided drafting (CAD) and design training. Demonstrated track record in problem solving, project management, and engineering design with the ability to manage people and resources to produce quality results on time and within budget constraints. Firsthand experience applying engineering principles to develop cost-effective solutions to design problems. Proven leadership and communication skills and a "go-getter" attitude that contributes to individual and team goals.

KNOWLEDGE, SKILLS, AND TRAINING

- AutoCAD 3D Modeling
- MicroStation
- MATLAB
- ArcGIS

- Structural Analysis
- Engineering Materials
- Geometrics and GIS
- Fluid Mechanics

- Geotechnical Engineering
- Project Management
- Spanish & French speaker

EDUCATION

Bachelor of Science, Civil Engineering   **Expected December 2016**
University of Maryland, College Park, MD   Major GPA: 3.2, Cumulative GPA: 2.8

Bachelor of Science, International Business   **May 2009**
University of Maryland, College Park, MD   GPA: 3.8

EXPERIENCE

Ecuador Project Leader   **June 2016 – Present**
Engineers without Borders, Uduzhapa, Ecuador
- Coordinated a team of eighteen volunteers to analyze soil data during the four-week construction phase, successfully installing 39 household latrines, significantly improving public health conditions

Construction Group Member   **Jan – Oct 2015**
U.S. Department of Energy Solar Decathlon, University of Maryland Team, College Park, MD
- Networked with company representatives at the 2009 International Builder's Show to obtain over $50,000 in donations of free and reduced-cost building materials.
- Performed friction testing on footings to analyze lateral load capacity; conducted compression testing on sample concrete cylinders to determine breaking strengths.
- Awards: People's Choice Award; 8th place in overall competition

Project Team Member, Bridge Anti-Icing Project   **Aug – Dec 2014**
Introduction to Engineering Design, University of Maryland, College Park, MD
- Designed, built, and tested a functional prototype of an autonomous bridge de-icing system.

International Sales Representative   **Aug 2009 – Oct 2012**
Hilton Worldwide, New York, NY
- Responded to sales inquiries, initiated new sales, and solicited potential clients.

MEMBERSHIPS AND ACTIVITIES

Society of Hispanic Professional Engineers (SHPE), Active Member   **Jan 2013 – Present**
American Society of Civil Engineers (ASCE), Secretary   **Sep 2013 – May 2014**

Calvin Double-Major

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D.O.D. SECRET CLEARANCE   • 1234 Testudo Rd, College Park, MD 20740   • (301) 456-7890

EDUCATION

B.S., Aerospace Engineering   University of Maryland, College Park, MD
B.S., Mechanical Engineering   Expected May 2017
Minor in International Engineering

Universidad Carlos III, Madrid, Spain   March – July 2015
- Shadowed engineers at Airbus Military's Flight Test Center in Getafe, Spain, while studying aerospace engineering courses in English

SKILLS

Microsoft Office	SolidWorks CAD/FEA	LabVIEW
Catia V5 CAD	Abaqus FEA	MATLAB
Pro/Engineer CAD	ANSYS FEA	C++ Programming

RELATED EXPERIENCE

Simulation-Based System Design Laboratory,   College Park, MD
Undergraduate Research Assistant   March – August 2016
- Created detailed 3-D components of virtual reality environments via CAD software programs for a DARPA research project

Battelle National Biodefense Institute   Frederick, MD
Engineering Intern   May 2015 – August 2015
- Edited building drawings, labeled room numbers on exhaust valves, and reviewed AutoCAD drawings and submittals for an autoclave move
- Helped orchestrate a preventative maintenance program for the Facility Operations group

Terps Racing (SAE), University of Maryland   College Park, MD
Baja SAE Vehicle Build; Project Team Leader   January 2014 – May 2015
- Modified previous year's Baja car for Birmingham, Alabama water event, converting it into amphibious ATV to traverse a 1-km W-shaped pond and road courses without removing flotation system
- Placed 4th out of 49 universities in the main event, a four-hour endurance race

United States Army Aberdeen Test Center   Aberdeen Proving Ground, MD
Engineering Technician Intern   May 2013 – February 2014; August 2014
- Wrote a 50+ page technical and chronological report detailing the range modernization project efforts
- Performed test director tasks on seeded-fault data acquisition road tests of MRAPs, HMMWVs and other military vehicles

MEMBERSHIPS AND ACTIVITIES

- American Institute of Aeronautics & Astronautics   September 2013 – present
- Black Engineering Society, Events Coordinator   September 2014 – present
- UMD Intramural Soccer   September 2013 – Present

Dana FirstYear-Telecom

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EDUCATION

University of Maryland College Park, MD
MS, Telecommunications Engineering Expected May 2018

BMS College of Engineering, Visveswaraya Technological University Bangalore, India
BE, Telecommunication GPA: 3.75 May 2014

RELEVANT COURSEWORK

- Networking Protocols
- Cyber Security
- Wireless OFDM Systems
- Wireless LANs
- Advanced Wireless Communications Networks
- Decision Modeling
- AWS/PCS System Implementation
- Organizational Behavior in Telecom Industry

WORK EXPERIENCE

McKeldin Library, University of Maryland College Park, MD
Office Assistant October 2016 – present
- Work on a software tool "BSR – Advance" for database maintenance.
- Use WEB services for making reports and updating database.
- Apply HTML to create web pages for library Press Releases.

Mobile Communications Ltd. Bangalore, India
Engineer September 2014 – July 2016
- Worked with marketing department to redesign coverage-extension sites to enhance company competiveness.
- Developed network capacity growth plans and designed 24 new sites to offload capacities from existing sites.
- Led design of 65 coverage-extension sites and optimization of 120 on-air sites.

PROJECT EXPERIENCE

WISPY, InSSIDer, WI-FI Scanner College Park, MD
Independent Project September 2016
- Inspected WLAN of University of Maryland and personal home access points, as well as the surrounding networks.
- Troubleshot the access points for higher dBm, playing with frequency spectrum and channels using the tool Channel, RSSI, and "Time Last Seen".
- Exported Wi-Fi and GPS data to a KML file to view in Google Earth; also compatible with most GPS devises (NMEA).

TECHNICAL SKILLS

Programming Skills: C++, SQL, SQL Server 2008, HTML, XML, JavaScript, MATLAB
Protocols Knowledge: TCP-IP, RIPv1, RIPv2, EIGRP, OSPF, BGP
Applications: Microsoft Office, Microsoft Windows XP and 2010
Tools: SPSS Tool, WireShark, MaxPlan

ACTIVITIES

UMD Cricket Club September 2016-present
Institute of Electrical and Electronics Engineers Bangalore, India
Event Organizer/Coordinator September 2013 – May 2016
- Increased attendance at IEEE tech fest and cultural festival by 15% over two years

ROHIT T. MASTERS

1234 Graduate Housing, Apt. 123
College Park, MD 20740

Phone: (123) 456-7890
E-mail: rtmaster2013@umd.edu

EDUCATION

UNIVERSITY OF MARYLAND   College Park, Maryland
M.E. Chemical Engineering   GPA: 3.7   Expected May 2018

UNIVERSITY OF VIRGINIA   Charlottesville, Virginia
B.S. Chemical Engineering, Business Minor   GPA: 3.8   May 2012
- Magna cum Laude

SKILLS AND CERTIFICATIONS
- **Software**: MATLAB, MathCAD, ASPEN, ANSYS, Expert Microsoft Office (Word, Excel, Access, and PowerPoint)
- **Laboratory**: Gas Chromatography, organic synthesis & purification, HPLC, atomic absorption

RELEVANT EXPERIENCE

ABC DEVELOPMENT   July 2014-August 2016
Energy Sector Analyst

Verification of Enhanced Oil Recovery Audits   Toronto, Canada
- Completed the audit in accordance with ISO 14064 Part 3: Greenhouse Gases: Specification with guidance for the validation and verification of greenhouse gas assertions – facilities generated over $1.8 million worth of carbon credits.
- Assessed whether the quantity of offsets generated was characterized accurately by evaluating calculation methodologies, re-performing direct and indirect emissions calculations, and analyzing P&IDs of the injection and production facility.
- Identified compressor seals and CO2 dissolved in stored crude as the missing emission sources that accounted for 22% of the total emissions from the site.

Greenhouse Gas Emission and Sinks Inventory, Oil and Gas Sector   Washington, DC
- Established the uncertainties associated with each emission source using @RISK, a Monte Carlo simulator capable of performing risk analysis in Excel spreadsheets.
- Improved the U.S. Inventory by researching and quantifying the emissions reductions from technologies and processes reported by Natural Gas STAR Partners to enhance the assumptions and the resulting emissions estimates.
- Recommended statistical methods to validate the emissions profile of a facility and estimated expected ranges for data elements collected through reporting.

Measurement Study for Indian Natural Gas Industry   Bhopal, India
- Designed Excel-based tools to aggregate emissions data into a comprehensive emissions inventory and perform economic analysis of mitigation options for the major emission sources; analysis revealed savings of $3.75 million.
- Presented the results of the measurement study and mitigation options to EPA client in a technical presentation.

Energy Performance Benchmarking and Conservation Potential   Washington, DC
- Established a baseline energy consumption profile for equipment used in transmission processing of oil and gas by researching Title V permits, vendor documents, and by using engineering calculations.
- Developed an estimate of potential energy savings by creating a database of conservation methods and using a proprietary calculation platform.

Climate Business Opportunities   Washington, DC
- Identified key investment opportunities to target as climate change and sustainability become increasingly important in developing countries.
- Inventoried and projected the growth of emissions from the oil and gas industry in developing countries based on key market metrics.
- Estimated a reduction potential for emissions by evaluating the implementation of mitigation technologies, including the potential for miniaturized gas-to-liquid technologies.
- Conducted a rigorous search of potential companies within the target regions that met the client's stringent investment criteria.

ABC ENERGY PARTNERS   June 2012- June 2014
Project Coordinator   Bethesda, MD
- Delivered technical presentations on emission mitigation technologies and practices and provided logistical support for numerous technology transfer workshops.
- Researched and organized data on process units at refineries from the Energy Information Agency.
- Calculated the equivalent distillation capacity of each refinery in the U.S. that took into consideration the complexity of process units at each refinery.

RESEARCH EXPERIENCE

PETROLEUM INSTITUTE   June – August 2011
Research Assistant   Abu Dhabi, U.A.E
- Established a theoretical formalism linking thermal and visco-elastic properties of crude oil used in reservoir simulations and enhanced oil recovery methods.
- Published results of research:
- Ayaz, A.; **Masters, R.T**., Temperature dependent thermodynamic and thermo-elastic properties of crude oil. Journal of Engineering Topics 2011, vol. 5, pp 123-145.
- **Masters, R.T**., Perez, P., Visco-elastic and dielectric relaxation studies of crude oil. Petroleum Science and Technology 2012, vol.21, pp 234-344.

AFFILIATIONS
American Institute of Chemical Engineers   September 2010 - present
Association of Energy Engineers   May 2012 - present
Tau Beta Pi Honor Society   September 2011 – May 2012

DENISE M. BIOTECH-GRAD

19 Some Fake Ct.   dSmith3@umd.edu
Elkridge, MD 21075   301-555-7890

EDUCATION

PhD, Bioengineering   Anticipated 2018
University of Maryland, College Park, MD
- Advanced to Candidacy, Nov. 2016
- GPA 4.0/4.0

B.S., Chemical Engineering   May 2013
University of Maryland, College Park, MD
- Summa Cum Laude, with Engineering Honors
- GPA 4.0/4.0

RESEARCH EXPERIENCE

Doctoral Dissertation Research   Jun. 2015 - present
University of Maryland, Baltimore, MD
- Investigate poly (amido amine) dendrimers as oral drug carriers of anticancer therapeutics.
- Synthesize surface modified dendrimers and dendrimer drug conjugates and characterize by Nuclear Magnetic Resonance (NMR) and Size Exclusion Chromatography (SEC).
- Assess cytotoxicity, cellular uptake and transepithelial permeability of dendrimers and dendrimer-drug conjugates using *in vitro* Caco-2 cell model
- Independently determined impact of PEGylation of dendrimers on dendrimer transport, uptake and interactions with epithelial tight junctions.
- Co-wrote book chapter: R. Kolhatkar, **D. Biotech-Grad**, and H. Ghandehari, "Functionalized Dendrimers as Nanoscale Drug Carriers," in Multifunctional Pharmaceutical Nanocarriers, V. Torchilin (ed), Springer, 2009, pp. 201-232.
- Presented research poster at conference: **D. Biotech-Grad**, R. Kolhatkar and H. Ghandehari. "PEGylation of Anionic PAMAM Dendrimers: Implications for Oral Delivery." Poster presentation, 35th Annual Meeting of the Controlled Release Society, New York, NY, July 12-16, 2009.

Undergraduate Research Project   Aug. 2010 –Apr. 2013
University of Maryland, College Park, MD
- Completed a competitive, NSF-funded, Research Experience for Undergraduates (REU) summer internship program and then continued research project as an undergraduate research fellow.
- Determined the surface structure and chemistry of DNA-GaAs biochips using Grazing Incidence X-ray Scattering, X-ray Photoelectron Spectroscopy and Atomic Force Microscopy.
- Investigated new application of biochip in biological dosimetry.
- Published manuscript in IEEE: M. Al-Sheikhly, **D. Biotech-Grad**, et al. "Radiation Induced Failure Mechanisms of GaAs Based Biochips," *IEEE Transactions on Device and Materials Reliability*. Vol. 4, No. 2., June 2005.
- Wrote and defended an undergraduate thesis as part of the Engineering Honors Program.

SAMPLE RESUMES

Summer Undergraduate Research Fellowship (SURF)   Jun.- Aug. 2012
National Institute of Standards and Technology,
Gaithersburg, MD
- Developed an automated method to convert two-dimensional HIV protease inhibitor chemical structures to three-dimensional animations showcasing inhibitor interactions with protease active site using Pymol software.
- Created 300 visualizations of HIV Protease-Inhibitor interactions to supplement HIV research database (HIVSDB).
- Presented results to scientists and peers at SURF Symposium.

WORK EXPERIENCE

Graduate Teaching Assistant   Sep. 2014 - May 2015
University of Maryland, College Park, MD
- Facilitated laboratory exercises for 40 students in Freshman Bioengineering Laboratory and delivered weekly lectures on engineering and biology topics.
- Graded 50 homework assignments weekly for Computational Methods in Bioengineering course and answered student questions concerning C and Matlab programming languages.

Undergraduate Teaching Fellow   Jan. - May 2012
University of Maryland, College Park, MD
- Selected as a Women in Engineering Undergraduate Teaching Fellow.
- Developed lesson plans for and led a 1.5 hour recitation each week for 30 students in "Mass and Heat Transfer.

Clark School Ambassador   Jan. - Aug. 2011
University of Maryland, College Park, MD
- Served as a student representative for the College of Engineering, responsible for giving presentations and tours to prospective students and parents, visiting local high schools and performing other recruitment duties.
- Developed curriculum and activities for "Discovering Engineering," a week-long engineering summer camp for middle school students.

LEADERSHIP AND EXTRACURRICULAR ACTIVIES

- Tau Beta Pi, Recording Secretary (2010-2011), Social Chair (2011) and Scholarship Chair (2012).
- Chemical Engineering Chair Search Committee, Undergraduate Representative, 2010-2011.
- Women in Engineering Coordinator Search Committee, Student Representative, Jul. – Aug. 2012.

AWARDS

- National Science Foundation Graduate Research Fellowship, 2014- 2016.
- A. James Clark School of Engineering Dean's Award, May 2011.
- Chemical Engineering Outstanding Senior Award, May 2011.
- Phillip Merrill Presidential Scholar, 2010-2011.
- Barry M. Goldwater Scholarship, 2010-2011.

92 Elm Street #6
Greenbelt, MD 20770

Michael H. Ph.D.

Cell Phone: 301.555.1234
E-mail: student@umd.edu

Education

Ph.D. in Electrical and Computer Engineering, Communication   Expected: 5/2018
University of Maryland, College Park, MD   GPA: 3.91/4.0

M.S. in Electrical Engineering, Control Systems   9/2012
Sharif University of Technology, Tehran, Iran   GPA: 3.81/4.0

B.S. in Electrical Engineering   5/2010
Sharif University of Technology, Tehran, Iran   GPA: 3.78/4.0

Computer Skills

Platforms: Unix, Linux, DOS, Windows XP/2000/NT, and VAX/VMS
Languages: C/C++, Java, MATLAB, Verilog, Assembly and C for Texas Instruments DSP processors, Assembly and C for embedded systems and Intel x86 Assembly
Software: Network Simulator (**NS2**) GloMoSim, CPLEX, and Qualnet

Experience

Graduate Research Assistant, ECE Department, College Park, MD   8/2014 - Present
- Conduct research on dynamical behavior of TCP traffic in IP networks, and developed *award winning* CDMA   Aggregate Perturbation **(CAP)** technology for Distributed Denial of Service (DDoS) Internet attacks (***C/C++, MATLAB, TCL and NS2 code***).
- Lead the design team of a library of signal processing blocks in Verilog. Designed and implemented ***Dataflow/RTL*** and ***gate level*** realization DSP blocks including FIR and IIR filters.
- Implement both the transmitter and receiver of a V22bis modem according to the ITU-T recommendations based on the Texas Instruments TMS320C30 DSPs (***C and TI Assembly Code***).

Control System Designer, MKK Control Systems (founder), Tehran, Iran   8/2012 - 7/2014
- Designed front-end of an embedded system of an autonomous process controller. This control system is currently being mass produced, and it has been installed in more than 100 plants.

Control System Design Chief Engineer, Fan-Niroo Company, Tehran, Iran   8/2012 - 8/2014
- Designed and implemented a control, emergency shutdown and process visualization system. The project included extensive hardware design of digital and analog control boards and implementation of programming in C/C++ and X86 Assembly.

Graduate Teaching Assistant, Sharif University of Technology, Tehran, Iran   9/2011 - 6/2012
- Assisted in teaching of senior level electrical engineering courses, including Signals and Systems, Control System Design, Digital Control and Modern Control.

Awards and Leadership

- ***First Place Award of Business Plan Competition,*** University of Maryland, 2015, for **MacroPhage Networks** (With Prof. M. Shayman and Dr. M. Alasti).
- ***Received $50,000 University Technology Development Fund (UTDF),*** Maryland Technology Development Corporation (TEDCO), 12/2014. (With Prof. M. Shayman).
- ***President,*** University of Maryland Electrical and Computer Engineering Graduate Student Association (ECEGSA), 2014 -2015.

SAMPLE RESUMES

US Patent and Invention Disclosure

- *Method for Quantifying Responsiveness of Flow Aggregates to Packet Drops in A Communication Network* (US pending patent number 20040233846).

- *Using Direct Sequence Spread Spectrum to Determine Responsiveness of a TCP Aggregate to Packet Drops,* reported to the Office of Technology Commercialization, University of Maryland, 4/2014, Ref. No. IS-2003-026.

Selected Publications

M. Shayman, R. Gahremanpour, R. Skoog, N. Jasinski and M. Ph.D., *"Network Management and Control Mechanisms to Prevent Maliciously Induced Network Stability,"* Proc. 8th IEEE/IFIP Network Operations and Management Symposium (NOMS-2013).

M. Ph.D., K. Gallichio, and M. Shayman, *"Mitigation of Denial of Service Attacks in the Internet,"* Proc. 41st IEEE Conference on Decision and Control (CDC-2012).

Research Proposals /Grants

"Routing and Topology Design of Hierarchical Sensor Networks" With Prof. Mark Shayman, ECE Department of the University of Maryland, Submitted to NSF Sensornet program 1/2013.

 "CDMA-Based Mitigation of Distributed Denial of Service Attacks" With Prof. Mark Shayman, ECE Department of the University of Maryland, Submitted to NSF NetS program 4/2014.

Professional Activities/Affiliations

- Paper Reviewer, INFOCOM 2009
- Paper Reviewer, International Conference on Communication (ICC) 2012 and 2014
- Member, Scientific Research Society (Sigma Xi)
- Student Member, IEEE

Graduate Courses

University of Maryland: Random Processes in Communications and Control, Multi-User Communication, Wireless Communication, Digital Communications, Detection and Estimation Theory, Digital Computer Design, CAD of Digital Systems, Advanced Digital System Design

Sharif University of Technology: Switching Systems, Information Theory, Data Communication Networks, Object Oriented Programming, Neural Networks, Fuzzy Systems and Sets, Adaptive Control, Multi Variable Control, Optimal Control, Robust Control, Robotic Manipulators, Applied Industrial Control, Modern Control, Nonlinear and Digital Control, Discrete Signal Processing, Operation Research, Abstract Algebra, Math Analysis, Linear Algebra

Additional Information

In The Media: "UM Business Plan Competition Could Launch Next Google," 5/3/2014. Received favorable comments about MacroPhage Networks and the CAP technology. Covered by PR Newswire, CBS MarketWatch, NBC, National Hispanic Corporate Council, and The Gazette.

LUKE ALUMNI

1205 Alumni Fancy Street, Washington, DC 20001
(202) 807- 90XX   lukealumni@umd.edu

CONSULTANT | PROJECT MANAGER
Product Design | Mechanical Engineering | Research & Development

Entrepreneur and product developer with a technical background and two years of consulting experience. Demonstrated expertise in business operations, quality control, budget analysis management, and negotiations and contract development. **Strengths include:**

- Quality Management
- Bid Development & Contract Administration
- Staff Leadership & Resource Management

- Product Design Engineering
- MATLAB
- C/C++ Based Arduino
- ANSYS
- SolidWorks

- Autodesk Inventor
- AutoCAD
- Microsoft Excel (Macros)
- SQL queries

PROFESSIONAL EXPERIENCE

BIG GOVERNMENT CONSULTING   Washington, DC
Senior Consultant | Engineering Manager   January 2015-Present
- Manage large scale projects including IT upgrades, HVAC installations, office renovations, and facilities operations
- Gather customer requirements, write statements of work, budget project funds, and drive schedule
- Review Architecture and Engineering design drawings for accuracy, feasibility, and code compliance
- Ensured submitted plans complied with ASHRAE, IBC, OSHA, and client-developed standards
- Presented three final project reports to senior leads and successfully gained closed projects

PRIVATE TECH CONSULTING CORPORATION   Reston, VA
Associate Consultant   August 2014-January 2015
- Utilized agile development methodology to design and deliver custom business process management applications in a fast paced environment
- Used a Java based framework and MySQL database language to aggregate and analyze business data
- Recognized by department for role in ensuring that the application was pushed to production on time

US GOVERNMENT, FACILITIES ENGINEERING   Washington, DC
Project Manager Intern   June-August, 2012 & 2013
- Acted as point of contact for all facilities planning and ad hoc needs of executive level offices
- Generated and oversaw the implementation of a recovery effort from an unexpected facilities crisis within a 12 hour window
- Reviewed design drawings, drafted two Statements of Work, and acted as point of contact for contractors

UNIVERSITY OF MARYLAND, MICRO- ROBOTICS LABORATORY   College Park, MD
Product Developer   January 2012- May 2012
- Developed fitness tracking workout gloves that communicate exercise data via Bluetooth Low Energy
- Developed a wiring schematic, designed a Printed Circuit Board, and constructed PCB in laboratory

EDUCATION

UNIVERSITY OF MARYLAND   College Park, MD
BS, Mechanical Engineering   **May 2014**
Department of Engineering Chairman's Award
Minor in Technology Entrepreneurship, Hinman CEOs Entrepreneurship Program,
Honors College - Entrepreneurship and Innovation