James Mullenbach

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EDUCATION

Bachelor of Science in Computer Science (Concentrations: Intelligence & Media),

Bachelor of Science in Physics,

Georgia Institute of Technology (Atlanta, Georgia)

Expected December 2016

GPA: 3.93/4.00

Master of Science in Computer Science (Planned Fast-Track)

Starting January 2017

Georgia Institute of Technology (Atlanta, Georgia)

Certificate in Data Manipulation at Scale: Systems and Algorithms, Coursera (U Washington)

RELEVANT EXPERIENCE

Software Engineering Intern Urjanet May 2016 - Present Atlanta, GA

• Developed, debugged, tested, and deployed new features for a group of cloud microservices using Spring, Ansible, Packer, and Amazon Cloudformation/SWF.

- Scripted critical money-saving AWS tasks such as upgrading API usage and cleaning unused EC2 resources in bash and Python.
- Wrote and performed integration, end-to-end, and load tests with JUnit and JMeter.

Undergraduate Research Assistant

Aug 2015 - May 2016

Borodovsky Computational Genomics Laboratory

Atlanta, GA

Atlanta, GA

• Developed novel machine learning algorithms for the identification of short protein-coding genes using ribosome profiling data. Earned President's Undergraduate Research Award.

Software Engineering Intern Urjanet May 2015 - Aug 2015

• Upgraded data extraction operation to asynchronously pre-process PDF images, employing AWS and enhancing scalability for expected influx of $\sim 20,000$ image sets per month.

 Worked with an agile team to ship first release of both a client web portal and RESTful API, making UI/UX design decisions.

Undergraduate Research Assistant Georgia Tech School of Physics May 2013 - May 2015

Atlanta, GA

- Built apparatus to study dynamics and bifurcations of two-dimensional fluid flows.
- Programmed GUI and utilized image processing to study phagocytosis of white blood cells.

TECHNOLOGY SKILLS

Programming Languages: Java, Python, JavaScript, C, Assembly, MATLAB, SQL Technologies: Spring, AWS, Play!, Linux, Git, jQuery, Bootstrap, LATEX, AngularJS, Cassandra

PROJECTS

Relevant Image Suggestions - Python Flask, Heroku, NLTK, various APIs (Team Project)

• Built an interactive Chrome Extension to display suggested images to accompany a body of text, using Google Search, face detection, and NLP techniques.

WorkReadyGrad mobile application - AngularJS, HTML/CSS, Git (Team Project)

• Developed a hybrid mobile application prototype designed to prepare college students for post-graduate life. Responsible for social network sharing and several individual features.

Dynamical systems simulation - Java (Research Project)

• Simulated the physics of a string of beads falling off a platform to explore nonlinearities. Applied physical principles and collision detection to a Java applet.

ACTIVITIES & LEADERSHIP

President, Delta Sigma Phi

Nov 2015 - Present

• Oversee all organization functions, set and maintain alignment towards goals, and lead weekly Executive Board and general chapter meetings for over 60 members.

FASET Orientation Leader, Georgia Tech

Mar 2016 - Present

• Facilitate orientation activities and acclimate new students to the campus environment.

Secretary & External Relations Chair, Delta Sigma Phi

Nov 2014 - Nov 2015

- Created a chapter-wide mentorship program to connect students with alumni in their field.
- Acted as liaison and representative for school Greek system and fraternity headquarters.

Campus Tour Guide, Georgia Tech

Sep 2013 - Dec 2015

• Represented Georgia Tech to over 60 prospective students, parents, and visitors per month through tours tailored to accommodate unique needs and requests.