

Matthew Poegel

Objective

Seeking a full-time position in software engineering and data science to apply my current skills and learn new practices and techniques

Education

Rensselaer Polytechnic Institute August 2013 - May 2017 Troy, NY
Expected dual bachelors degree in Mathematics and Computer Science 3.87 GPA

Undergraduate Research Assistant - working with Dr. Kristin Bennett in the Semantic Numeric Exploration Technology group in the Tetherless World Constellation to investigate new methodologies for visualization of semantic and numeric data. Project: <https://semnext.tw.rpi.edu> (Spring 2015 - Present)

Experience

May 2016 - August 2016 ViaSat Carlsbad, CA
Data Science/Software Engineering Intern

- Created an application that used online, unsupervised learning to detect anomalies in log messages of distributed systems such as Hadoop or Impala
- Streamed log messages from servers, engineered features, ran custom detection algorithms, reported results and figures
- Built in Python with Apache Spark in a team with two other interns

May 2015 - August 2015 ViaSat Carlsbad, CA
Software Engineering Intern

- Worked in a team with one other intern to build an expandable monitoring platform for a large, scalable web application in development at ViaSat
- Utilized Python, TypeScript, PostgreSQL, and Git and open source libraries Tornado, Graphite-Beacon, and Grafana.

May 2014 - August 2014 Jacobs Nashua, NH
Software Intern

- Executed and edited test procedures for components of navigation software for military aircraft
- Worked with Team Foundation Server, Surround SCM, Test Track Pro, and Rational DOORS

Skills

- Skilled in C, C++, Git, Python, Matlab, JavaScript, TypeScript, MongoDB, HTML5, CSS3, Node.js, Docker
- Working knowledge of PostgreSQL, SQL, Arduino, AWS, R
- Capable of implementing and using linked lists, trees, hash tables, priority queues, polymorphism, inheritance, asynchronous computing, concurrency
- Capable of performing data analysis (classification and regression) on data sets in Python and Matlab implementing feature engineering, LDA, PCA, Mean Method, K-means, linear models, Support Vector Machines, Neural Networks, Self-Organizing Maps
- Proficient with Microsoft Word, Excel, PowerPoint

Clubs and Activities

- HackRPI 2016 Co-Director, HackRPI 2015 Director of Hospitality, HackRPI 2014 Organizer
- Phalanx (Leadership Honors Society): secretary, Fall 2016 - Spring 2017; member, Spring 2016
- Pi Mu Epsilon (Mathematical Honors Society): member, Spring 2015 - Present
- Upsilon Pi Epsilon (Computer Science Honors Society): member, Fall 2015 - Present
- Rensselaer Hackathon Organization: Club President, Fall 2015 - Spring 2016
- Mathematical Contest in Modeling 2016, Honorable Mention: modeled private donations to American universities
- RPI Datathon 2016, 4th Place: globally modeled government effectiveness's sensitivity to the gender ratio of parliament

Open Source Projects (github.com/mpoegel)

- HackRPI Application Suite - tools and web applications to manage users and event data (Meteor, Node.js, MongoDB)
- SemNEXT-Visualizations - A web application to create interactive visualizations to depict susceptibility windows during brain development for any disease (Node.js, TypeScript, D3.js)