

OBJECTIVE

To obtain a challenging position at a reputable company where I can use my engineering talents and my computer programming skills to benefit the company and contribute to its success.

EDUCATION

The University of Pittsburgh
Swanson School of Engineering
Chemical Engineering Major / Mathematics Minor
Fall 2013 – Present
Anticipated Graduation: Dec. 2017
Current GPA: 3.817 (on a 4.0 scale)
GRE Scores: Quantitative: 170/170
Verbal: 155/170



HONORS

- Bayer USA Foundation Special Scholarship recipient
- Swanson School of Engineering Dean's List
- National Society of Collegiate Scholars
- Delta Epsilon Iota Academic Honor Society
- Phi Eta Sigma National Honor Society

COMPUTER SKILLS

- Highly proficient with front-end web development including JavaScript and other front-end technologies such as bootstrap.js, AJAX, jQuery, and graphing libraries like highcharts.js and c3.js
- Experience with iterative models for calculating thermodynamic properties and kinetic properties of polymer reactions
- Experience with Github and version control software as well as MATLAB, SQL, UNIX, Java, Python, and Visual Basic for Applications
- Some back-end web development experience including node.js and REST APIs

WORK EXPERIENCE

Research Assistant at the University of Pittsburgh, (January 2017 – Present)

- Used RASPA, a computational chemistry software package, to model adsorption in Metal Organic Frameworks and compare computational results to experimentally determined values
- Developed and assisted in development of Python files that enabled quick manipulation of a large number of simulation files
- Investigated trends in data as well as patterns in the results of several simulations of interest. Worked to identify possible errors in simulation results
- Determined the degree to which several input variables affected simulation operation and results

Co-operative Education Intern – Covestro LLC (formerly Bayer MaterialScience LLC), Pittsburgh, Pennsylvania (August 2015 - December 2015; May 2016 – August 2016)

- Created multiple web applications using AJAX and JavaScript. Employed various data analysis techniques to include features such as sorting, filtering, and grouping data based on user preference.
- Updated Reactor Model and Benchmarking/Best Demonstrated Step Time Calculator applications by debugging errors and rewriting code to improve program efficiency. Updated corresponding user documentation.
- Studied work-up vessel data trends and performed a detailed cost analysis comparison on different systems for polyether creation

Co-operative Education Intern – Bayer MaterialScience LLC, Pittsburgh, Pennsylvania (January 2015 - May 2015)

- Developed a Visual Basic application to query plant data and perform a chemical product recipe efficiency analysis
- Created process and instrumentation diagrams in PI ProcessBook, replicating Aspen diagrams that were unavailable outside working hours
- Studied plant reactor data trends and recommended Distributed Control System (DCS) programming corrections to improve process efficiency
- Analyzed global vacuum distillation systems, compiling data and conducting efficiency comparisons between Bayer's chemical plants

Intern - Wastewater Collection System, South Fayette Township Municipal Authority, Bridgeville, Pennsylvania (May 2014 - August 2014)

- Maintained sewage pipeline information on township-wide Geoplan server
- Repaired sewage lines and replaced piping
- Managed monthly distribution of township sewage bills
- General sewage plant maintenance and inspection of facilities

Cashier/Stock Associate, Bottom Dollar Foods, Bridgeville, Pennsylvania (May 2013-August 2013), and K-Mart, Bridgeville, Pennsylvania (April 2012 - August 2012)

- Replenished store inventory with new product and returns, ensuring proper product placement on store shelves
- Interfaced with customers by operating store cash registers

Summer Program Volunteer, South Fayette Public Library (Summers of 2011 & 2012)

- Planned and managed summer reading programs for children ages five through ten
- Shelved books and organized the card catalog

ACTIVITIES / HOBBIES

- National Society of Leadership and Success
- University of Pittsburgh Intramural Volleyball League
- Independent web development and involvement in Codepen Pittsburgh
- Traveling, attending concerts, scuba diving and playing guitar