

# Raymond Xia

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## Education:

**Binghamton University, State University of New York**

**Watson School of Engineering and Applied Science, Harpur College of Arts and Sciences**

*Bachelor of Science in Computer Engineering, Bachelor of Arts in Mathematics*

May 2017

*Cumulative GPA: 3.59/4.00 | Cum Laude*

Lockheed Martin Honors Scholarship: Fall 2015, Spring 2016 (Top 5 CoE) | American Dream Scholarship: Fall 2015,

Eta Kappa Nu Engineering Honor Society: Spring 2016 | Pi Mu Epsilon Math Honor Society: Spring 2016

## Technical Skills:

- |          |               |           |            |
|----------|---------------|-----------|------------|
| • C/C++  | • Git         | • LTSpice | • MATLAB   |
| • Python | • Javascript  | • R       | • Assembly |
| • Java   | • Agile/Scrum | • HTML5   | • Verilog  |
| • VHDL   |               |           |            |

Electives: Time Series Analysis, Econometrics, Corporate Finance

GitHub: <https://github.com/Hobonese>

Website: <http://bingweb.binghamton.edu/~rxia4/>

## Professional Experience:

**General Electric Transportation**, Melbourne, FL

May '16 – Aug '16

*Software Developer Intern*

- Adapted well and learned quickly to meet the demands of software engineering from problem solving in academia to applying learning in real world application which created a large-scale software for multimillion dollar trains across many countries
- Collaborated well in a scrum team to effectively communicate in practicing scrum ideology, in which each member of the team rotated roles to understand scrum mechanisms in participating in daily scrum meeting, organizing product backlogs in backlog refinement, outline sprint backlog in sprint planning, partaking in sprint review, and positively contribute in sprint retrospective
- Programmed in java, built test code with TDD (JUnit), utilized Maven as a build tools, employed web services with JavaScript and RESTful, stored data in Oracle database, use Jenkins to build, test, and deploy software, and replace the logging system to a new system with data-collection, parsing, and analytics called Elasticsearch, Logstash, and Kibana (ELK)

**Theta Tau Professional Engineering Fraternity**, Binghamton, NY

Jan '16 – May '16

*Academic Chair*

- Premeditated the layout and organized content of the Theta Tau library, which reduced search time and opened resources for the chapter to study, and designated study and library hours for tutoring sessions to be held
- Advised members regarding résumé, professionalism, and academics to create a successful professional profile for internships and how to sell one's self during career fair
- Educated new members about the required skills to do well in college, such as prioritizing tasks, time management, organization, to think critically and analytically, to make logical decision, and to positively relieve stress

**Educational Opportunity Program, BEP 2015**, Binghamton, NY

June '15 – Aug '15

*Math Teacher Assistant/Tutor*

- Developed personal relationships with students and helped facilitate classroom learning to achieve success in classes, and extracurricular activities while providing a smooth transition into freshman year
- Collaborated with the math department and Educational Opportunity Program staff to closely record how each student behaved and decided on actions to take regarding good behavior and negative behavior

## Engineering Experience:

**Calcium Ion Detector Monitoring Device**

May '15 – May '16

*Undergraduate Research at Binghamton University, Department of Electrical and Computer Engineering*

- Researched the rare disease, Autosomal Dominant Hypocalcemia, and used calcium which produced an electrical signal for a measurement that is a part of a take home test for people who are calcium deficient
- Measured calcium solutions using self-made calcium ion specific microelectrode which led to testing blood samples from doctors and then amplifying the signal through a high impedance instrumental amplifier from millivolts to volts
- Programmed an algorithm, using C, on a 16-bit microprocessor to an Explorer Board 16 with Microchip MPLAB X IDE to use the processor's ADC function that displayed voltages, from the microelectrodes, and exact calcium concentration

**Mine Detecting Maze Solving Rover 5 Robot**, Binghamton, NY

Jan '16 – May '16

*Team Leader*

- Concocted a program that controlled a robot and evolved the project with technical skills, such as pulse-width modulation, a circuit that was a metal ("mine") detector, programmed a ultrasonic sensor to calculate distance to obstacles, and a artificial intelligence to effectively circumnavigate the track, avoiding pillars, walls, and mines
- Managed a team to create a schedule that set project deadlines and worked to meet those deadlines with efficiency to solve and debug our software, in VHDL, on a circuit with the FPGA and Arduino