Tyler Roberts

15 Bank St., Apt. 116B
White Plains, NY 10606

tjroberts314@gmail.com
(262) 388-4050

Objective - Full-Time position in Computer Engineering.
LinkedIn: https://www.linkedin.com/in/tyleroberts
Website: http://tyler.engineering

Education

B.S. Computer Engineering, Computer Science, & Mathematics with Physics Certificate.
University of Wisconsin - Madison
Computer Skills - Python, C++, C, Linux, Bash, Verilog, SystemVerilog, Matlab, Java, Git.

Experience

IBM Corporation, Yorktown Heights, NY — July 2017 - Present
Software Engineer, Watson Health Cloud
- Work on projects that regulate patient data by adhering to data standards within health care.
- Unit test and verify deployment of code across many environments and servers.
- Worked on front end UI for our clients to interact and use our services.
- *Tools & Technologies: Python (2.7), Java, Docker, HTML, Angular, Linux, MacOS.*

UW-Madison Plasma Physics Dept., Madison, WI — Jan. 2016 - May 2017
Scientific Programmer
- Collaborated with scientists and professors by helping them with code used in their research.
- Worked with code in Python and C++ used in the Madison Symmetric Torus experiment.
- Organized and taught Python tutorials for grad students and postdocs unfamiliar with Python and OOP.
- *Tools & Technologies: Python (2.7), C++, MacOS, Linux.*

Intel Corporation, Hillsboro, OR — May 2016 - Aug. 2016
Pre-Silicon Validation Engineering Intern
- Improved debug tool by creating my own checkers and algorithms that are used to validate the SoC architecture. My improvements were able to detect and isolate several bugs found within the design.
- Enhanced a validation tool by developing features that created easy debug for members of the design team. Managed to increase the productivity of the developers and validators as well as save time for the company.
- *Tools & Technologies: Python (3.4), Perl, SystemVerilog, OVM/UVM, Unix.*

Micron Technology, Longmont, CO — May 2015 - Aug. 2015
Product Validation Engineering Intern
- Tested solid state drives to ensure they performed correctly when given certain commands.
- Wrote a python script that served as a wrapper for the company's code documentation, now used at Micron.
- Worked with Micron's test automation platform, and used FIO, an I/O benchmarking tool, for testing the SSDs.
- *Tools & Technologies: Python (2.7), Bash, Linux, Git, JIRA, Jenkins.*

Projects

Take Data 3 - UW-Madison Plasma Physics
- Improved Ph.D. candidate's code so that it would communicate with additional instrumentation added to the experiment.
- Collaborated extensively with scientists and professors to deliver a fully functional tool for their research.
- Taught new graduate students Python and the code base so they could carry on my work where needed.

Debugging Tool - Intel Corporation
- Improved upon a post-silicon debugging tool in pre-silicon by adding additional checkers and algorithms for signal detection.
- Caught several bugs in the SoC and helped the designers to fix the bugs faster and more effectively.
- Added improved debug hints and documentation for debugging tool to improve efficiency of debugging across teams.

Validation Tool - Intel Corporation
- Developed Python modules in large code base for validation teams to share key architectural, test and debug knowledge.
- Collaborated with several teams within DDG to determine the best way to provide feedback in the debugging process.
- Developed features that created easy debug and enabled members of the design team to become effective debuggers.