

Tyler Roberts

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LinkedIn: <https://www.linkedin.com/in/tyleroberts>

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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.
- Increased test case coverage from 30% to 90% using Python unit tests since joining the team.
- Assisted other teams with the development of Python applications. Including one that moved a team's locally stored data and user accounts to Bluemix, IBM's cloud platform as a service.
- Designed and engineered a web application from the ground up. Responsible for the front-end, and worked alongside my team members as they developed the other layers of the application.
- Used Docker to rigorously test the deployment of the web application onto a server.
- *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.

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.