Alexander Phillips

Test Development Engineer III

San Jose, California

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Skills

Programming Languages:
Python, C, Rust, Go, Bash, Matlab, Assembly (Motorola HCS12), Java

Hardware Description Languages:
System Verilog, ABEL

Web Development:
HTML5, CSS, Javascript

Software:
Catia, AutoCAD, ModelSim, QuestaSim, Eagle, GNU + Linux Operating System

Certifications:
Qualified Sealed Radioactive Source Handler, LEAN Bronze

Awards

Jabil Star Award Recepient
Jabil Respect, Recognize, Reward Recepient
1st First Place Winner: Regional Jabil Best Practices Competition

Education

2017-2020 M.Sc. — University of Leicester
Computer Science

2010-2015 B.Sc. — Purdue University
Electrical and Computer Engineering, Minor in Physics

Experience

2016 - Now Jabil Circuit Inc. (*Test Development Engineer III*) — San Jose, California
- Promoted from intern to lead test engineer of the High Performance Computing division over the span of three years.
- Selected for global website display of accomplishments.
- Work with customer engineers to design tests for products.
- Determine design flaws through analysis of customer products.
- Manage the engineers, technicians and operators in division team.
- Site-wide engineering consultant for new project introduction.

2013 - 2015 Purdue University (*Research Assistant*) — West Lafayette, Indiana
- Developed and implemented methods using data received from XENON100 detector to determine possible Dark Matter interaction.
- Set up and created hardware to work with a neutron generator and designed hardware to replace the gamma recoil discrimination scripts.
- Developed scripts in C and Python to discriminate gamma recoils.

2015 King Saud University (*Research Assistant*) — Riyadh, Saudi Arabia
- Designed and created several dye-sensitized solar cells and used university equipment to determine the quantum efficiency of each.

Projects

2016 - Now Enterprise Emulation Platform Automation Framework
Designed, built and continously updating the infrastructure for automated testing of the customer's Enterprise Emulation Platform in Python, Bash and C shell on the GNU + Linux command line.

2016 Test Result Data Parser
Developed and launched a data parser in Python (and later in Rust) for collection and upload of test results into the company's MES system.

2017 JTAG Test Result Data Parser
Developed and launched a data parser in Go for collection and upload of test results into the company's MES system.

2017 Visual Test Progress Monitor
Developed a live visual test progress monitor in Python, Go and SQL which is now on display on the manufacturing floor.

2018 Data Analysis Portal
Created and set up a server that can securely pull data from multiple networks and multiple test stations and provide the data on an internally accessible website.

2018 Internal Site Wiki
Created and set up internal wiki for all customers and products to explain products to new hires, track issues encountered on products, contact information of relevant engineers involved, etc.

2019-Now Large Scale Automation Framework
Designed, built and continously updating the infrastructure for automated testing of the customer's large scale device testing in Python and Bash on the GNU + Linux command line.

2019-Now Generative Adversarial Neural Network
Suggested, designed and implemented a neural network (GAN) to identify manufacturing defects of printed circuit boards.