Neil Guertin

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EDUCATION

Rochester Institute of Technology, Rochester, NY September 2012 - May 2017 Bachelor of Science, Computer Science and Computational Mathematics College of Science Deans List x7

GPA 3.8

SKILLS

Most Proficent		SQL	MIPS	Linux	Compilers
MATLAB	Python	SML	Vimscript	gdb	Operating Systems
$C{+}{+}$	Java	IDL	ĿŦĘX	Perforce	Computer Architecture
C	Bash	×86		Git	Linear Algebra

EXPERIENCE

Quality Engineer

July 2018 - Present

MathWorks, MATLAB Language Analysis, Transformation, and Design Natick, MA

- · Searched for and reported bugs found in MATLAB language and syntax
- · Wrote tests and testing tools, including individual tests for bug fixes and complete suites with documentation for new features
- · Maintained existing legacy test bed, taking part in small and large, individual and company-wide, projects for updating tests to meet modern standards
- · Provided feedback on testability and usability of new features

Application Support Engineer

June 2017 - June 2018

MathWorks, Engineering Development Group

Natick, MA

- · Provided technical support to users of MATLAB and its Toolboxes
- · Investigated and wrote articles for crash cases and taught other ASEs how to use the automated crash reporting and response system
- · Used previous experience with MATLAB Graphics to assist other ASEs on cases

Software Engineer in Test Intern

June - December 2016

MathWorks, Handle Graphics QE

Natick, MA

- · Wrote testing tools for MATLAB Graphics including mixins and a comparator
- · Updated and improved a large collection of legacy tests

Lab Programming Researcher

June - December 2015

Center for Detectors (RIT)

Rochester, NY

- · Assisted two faculty and two engineers on NASA and NSF funded research
- \cdot Wrote IDL code to gather, reduce, analyze, plot, and simulate data
- · Improved temperature and pressure logging capabilities on four dewar systems

Student Lab Instructor (TA)

September 2013 - May 2017

RIT Computer Science Department

Rochester, NY

- · Tutored students in class, in the mentoring center, and privately
- · Graded homeworks and labs using custom scripts

PROJECTS

Parfor Test Rewrite and Expansion (MATLAB)

Fall 2018-Present

- · Updated and rewrote a large legacy test suite which had fallen into disrepair
- · Parameterized tests, abstracted out common functionality, and filled testing holes
- · Improved maintainability of the test suite by reducing total lines, applying consistent standards, and using modern tools
- · Improved quality of the product by finding bugs and increasing coverage

GraphicsComparator (MATLAB)

Fall 2016

- · Built an extremely powerful and flexible comparator for graphics objects for use in testing save/load, copy/paste, and other related workflows
- · Responsible for all parts of project including design, documentation, and testing

Logisim Grading Harness (Python, Bash)

Spring 2015

- · Created grading harness for the circuit simulation tool Logisim
- · Integrated into CS department's in house grading software try