Ieff Martin

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Student of Computer Science seeking a software engineering internship for the summer of 2018.

Education

Worcester Polytechnic Institute

Master of Science in Computer Science, Class of 2019, GPA: 4.00/4.00

Worcester Polytechnic Institute

Bachelor of Science in Computer Science, Class of 2019, GPA: 3.98/4.00

Minor in Electrical and Computer Engineering

 Relevant Coursework: Algorithms, AI, SWE, Machine Learning*, Data Mining*, Secure SWE*, OOD, Database Systems, Numerical Methods of Analysis*.

o Programming Languages: Java, C, Scala, Python, SQL, HTML, CSS

• Software and Systems: Git, LATEX, Linux

Work Experience

MIT Lincoln Laboratory

Cyber Analytics and Decision Systems, Research Intern

o Developed a taxonomy for cyber security data visualization tools by conducting an extensive literature review.

o Implemented analysis features in an existing cyber security data visualization tool using Scala.

o Designed and implemented infrastructure to support the streaming of large time-stamped datasets using Java.

Analog Devices Incorporated

Software Engineer Intern

o Implemented Bluetooth communication infrastructure to support an internet of things project.

Designed a custom Bluetooth Low Energy protocol to maximize the rate of data transfer.

Implemented server infrastructure to transmit data from an embedded device using C.

o Implemented *client* infrastructure to receive transmitted data for Android and Linux systems using Java and Python, respectively.

Project Experience

LetterCraze Software Engineering (CS3733)

WPI October 2016-December 2016

o Lead a team of 5 to develop a game that integrated aspects from Candy Crush and Scrabble.

o Designed the application using the entity boundary controller pattern.

o Implemented various aspects of the backend including an AI board population algorithm using Java.

o Evaluated the game's correctness by writing JUnit test cases to reach 80% code coverage.

Rubik's Cube Solver Artificial Intelligence (CS4341) WPI

August 2016–October 2016

o Designed a novel Rubik's Cube solver that employed the IDA* search algorithm and sub-goal decomposition.

- o Implemented the solver with the Manhattan Distance heuristic and multiple decompositions using Java.
- o Performed a experiment to measure the performance of each decomposition.
- o Refined the solver to be 33% more move-efficient and 93% more time-efficient than an average human solver.

Leadership Experience

Institute of Electrical and Electronics Engineers

Vice President (Current), Webmaster (Current), President, Treasurer, Secretary

2015-Present

Computer Science Department

Senior Assistant (Tutor)

August 2016-Present

Residential Services Residential Advisor

August 2016–May 2017

Worcester, MA

Worcester, MA

Lexington, MA

Wilmington, MA

July 2016–August 2016

May 2017-August 2017

2017-Present

2015-Present

WPI

^{*}To be completed by May of 2018.