Jooseppi Luna

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Education:

Senior, Bachelor of Science in Mechanical Engineering and Computer Science December 2018
University of Massachusetts Lowell, Lowell, MA
Related Coursework: Data Structures in C, Object-Oriented Programming in C++, Computer Architecture and Operating Systems, Programming Languages, Foundations of CS, Algorithms, CAD (SolidWorks), Strength of Materials, Kinematics, Mechanical Controls, Thermal fluids

Skills:

Programming Languages: C, C++, Python, Racket, MIPS Assembly
Version Control Systems: GitHub, IBM ClearCase, Perforce
Operating systems: Windows 7/8.1/10, Ubuntu Linux, macOS
Text Editors/IDEs: Emacs user, former Vim, Visual Studio, DrRacket, Arduino
Microsoft Office: Word, PowerPoint, Excel, Outlook
Technical: Motion control, image capture/processing, unit testing
Writing: Conference abstracts, SOPs (standard operating procedures), presentations, proofs

Relevant Experience:

Software Engineering Intern, Arista Networks May 2018- August 2018

- Working backwards through TACC code (Arista internal language) to deduce what registers, counters, and ports ate associated with each other.
- Developing ability to learn quickly because of Arista's huge codebase

Software Engineering Co-op, Mercury Systems, Andover, MA May 2017 – January 2018

- Designed and built automated unit testing framework in Python for IPMI firmware developers to use
- Showed strong design skills by determining a design from broad requirements based on user needs
- Interacted with manager, software director, and IPMI developers and balanced meeting all their different requests and needs
- Showed strong attention to detail by reviewing 70-page long IPMI firmware specification for specification review for errors both in style and content

Mechanical Engineering Research Assistant, HEROES Lab June 2015 – December 2016

- Lead author on conference paper about microscopic imaging with of parachute fabric presented at AIAA Summer 2017 Aerodynamic Decelerator Systems Technology Conference
- Wrote SOP for 9-month experiment of weekly tests; conducted tests

Relevant Academic Projects:

Type Soundness proof for simple language Spring 2018

- Wrote 20-page proof proving type soundness for language containing integers, lists, pairs, and lambda application.
- Proved type soundness by showing progress and type preservation for all expressions in the language

Computing III (OOP in C++): Poker Game Fall 2016

- Built a poker game that intelligently plays against the user
    - Use classes to represent card, deck, and hand; game plays the dealer's hand and gives the user an interface to play his hand; hands score themselves and the driver compares to declare the winner

Volunteer Work:

Usher/Greeter, Park Street Church, Boston, MA Fall 2006 – Present

- Consistently serving for 11 years, developing leadership and people skills
- Fill in for head usher when not present, managing 8-9 ushers welcoming a congregation of ~350 people