## Sean M. Richardson

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#### **Education:**

- University of California Riverside 4th year, Expected Graduation Fall 2019
  - B.S. of Computer Science, GPA: 3.15
- Ramona High School Graduated June 2014, GPA: 4.1

## **Experience:**

- UCR Dean's Office, Student Intern (June 2018 August 2018)
  - o Focused on securing IoT devices and public access kiosks
  - o Designed custom system administration scripts
  - Configured group policies for office work stations
  - o Assisted in installing campus computing center

# **Projects:**

built using C++.

- FPL\_Interpreter <a href="https://github.com/vastopol/FPL\_Interpreter">https://github.com/vastopol/FPL\_Interpreter</a>
  A recursive descent interpreter for a high level functional programming language I designed and
- Jmips <a href="https://github.com/vastopol/Jmips">https://github.com/vastopol/Jmips</a>
   A Mini Java compiler which outputs 32-bit MIPS assembly code. Written in Java using JTB and JavaCC
- Disco <a href="https://github.com/vastopol/disco">https://github.com/vastopol/disco</a>
   A custom disassembly and binary patching framework for the LC-3 computer architecture and assembly language
- Inspector\_Gadget <a href="https://github.com/vastopol/Inspector\_Gadget">https://github.com/vastopol/Inspector\_Gadget</a>
   A return-oriented programming security exploit finder. This can disassemble a binary and look for ROP gadgets in the application.

## **Professional Skills:**

- Programming Languages: C++, Python, Java, C, BASH Shell
- Compiler and programming language design and implementation
- Experience with binary analysis, disassembly, and reverse engineering
- Knowledge of computer security and endpoint IoT security concepts

### **Activities:**

- ACM The Association for Computing Machinery member
- Cyber@UCR Cybersecurity Club member, CTF team, CPTC team
- Guardian Scholars Program for Foster Youth Member and Scholarship Recipient