

# Dillon Lareau

**Github:**  
<http://github.com/dlareau>

**Contact Info:**  
(203) 822-8199  
jlareau@andrew.cmu.edu  
JDLareau1@gmail.com

**Education** Carnegie Mellon University, Pittsburgh PA - Graduate Student - QPA 3.51  
• **M.S.** in Electrical and Computer Engineering May 2017  
- Specializing in Embedded Systems, Computer Security, and Digital Design  
• **B.S.** in Electrical and Computer Engineering, Minor in Computer Science Minor May 2016  
- Graduated with University Honors

**Work Experience** **Intel Corporation** - SSD System Test Engineer Summer 2015  
• Responsible for proving viability of Intel's new high end SSD product line  
• Wrote a series of tests in C++ to find bugs in drive functionality on the system level  
• Identified and assisted in the repair of multiple major software and hardware issues  
• Solutions I developed are part of multiple product lines launched in 2016  
**iTownStore** - Software Engineer Summer '13 '14 '16  
• Responsible for creating the customer management system currently used by the company  
• Wrote a three thousand line system from scratch using PHP, mSQL, and Javascript  
• Responsible for adding new website functionality and integrating with point of sale system  
• Created and maintained computer network and system infrastructure essential to the company.  
**Carnegie Mellon University** - Teaching Assistant (7 semesters) Spring 2013 - Present  
• Asked by professor to TA 18-240 - Structure & Design of Digital Systems - Head TA  
• Led team of TAs to organize and run lab projects for the course  
• Worked extensively with Verilog to simulate hardware designs and program FPGAs  
• Wrote improved automatic grading script for digital homework

**Languages/Skills** **Proficient Languages:** C, Python, x86/(64) Assembly, PHP, System Verilog  
**Familiar Languages:** C++, Perl, Basic, Java, Javascript  
**Tools:** AutoCAD, Google Sketchup, Autodesk Eagle, Synopsis VCS, and Quartus II  
**Knowledge Areas:** Operating systems, Distributed systems, Real time embedded systems, Logic design and verification,

**Relevant Coursework** 18-733 - Applied Cryptography 18-549 - Embedded Systems Capstone  
18-643 - Advanced Reconfigurable Logic 18-732 - Secure Software Systems  
15-210 - Parallel and Sequential Data Structures 18-739 - Special Topics: Advanced Cyber Security

**Projects** **Custom Operating System-** Co-wrote a unix-like kernel that implements virtual memory management, process scheduling and control, threading, and basic locking and synchronization primitives.  
**Android w/ Real Time-** Worked as part of a team project to add real time scheduling, management, and constraints as well as power monitoring to the Android mobile operating system.  
**Sribe** - Embedded systems capstone project to create a simple, LIDAR based, place anywhere device to detect large scale writing/drawing without the need for additional user held hardware.  
**Morse Code Decoder** - Created an embedded system to decode morse code sequences in real time; written in C and assembly using a 16 bit Motorola CPU.  
**CAREography** - Intel Top Hack first place project - Built and programmed an Intel Edison controlled semi-autonomous miniature car programmed via the web. Control software written in C.  
**PHCMU Webserver** - Wrote a 4k line Django app to run and manage PuzzlehuntCMU activities.

**College and Community Activities** **Plaid Parliament of Pwning (PPP)** - Student computer hacking team (2 years)  
• Solved problems in Computer Security "CTF" competitions in which PPP placed first.  
**PuzzlehuntCMU** - Organization to plan and take part in puzzlehunts on campus. (5 years)  
• Staffed and helped create a corporate-sponsored, campus-wide puzzle hunt for 7 semesters.  
**Keeping Geeks Busy (KGB)** - A social org focused on humor, fun, and technology (5 years)  
• Head of Construction as well as Head Electrician for KGB's 2013 and 2014 Booth.  
• Previously VP for one academic year and Treasurer for two academic years.  
**First Year Advisory Board** - Carnegie Institute of Technology (1 year)  
• Part of a board that planned events and engaging activities for the freshmen in CIT.