### Oliver H.B. Scott

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# Experience

May 2015 -Feb. 2016

### N12, Cambridge MA

Systems Engineer, Internship

- One of two engineers responsible for the automation, data acquisition and networking of a distributed system of sensors and devices in a small multidisciplinary Agile run team.
- Drastically improved system reliability by spearheading the design and development of a closed-loop control system coded in C. The system replaced the legacy open-loop Labview control program with the addition of a Linux machine running multiple VMs to handle system delegation in a master/slave architecture.
- Worked independently to write C APIs for five third-party devices for integration into the control program. Communication between subsystems was performed using Modbus, Ethernet and RS-232.
- Lead the automation of data collection by implementing N12's RDBMS using MariadDB.

July 2014 -Dec. 2014

### Meditech, Framingham MA

Data Repository Programmer, Internship

- Increased usability of data for customers by assisting in the migration of data from proprietarily data formats to equivalent MySQL tables as part of an Agile run team.
- Resolved 38 bug requests using SQL and two proprietary languages during a period in which the team's bug count fell from 149 to 86. By year's end, the bug backlog had dropped 41% from the previous year.

# **Projects**

### Backend, Team: AmericaSCORES

- Developed the backend components for a web and mobile product created for a local NGO.
- Key contributor in designing and implementing a RESTful API using Node, Express and MySQL.
- Headed the integration of Auth0 for authentication and authorization purposes.

### Web Application, Team: Orator

- MakeBU Hackathon, 2nd Place.
- Leveraged jQuery, AngularJS and various open source libraries to develop a web application aimed at offering constructive feedback for public speaking.

### Senior Capstone, Team: Autonomous Drone

- Successfully developed a drone capable of fully autonomous flight using all open-source hobbyist technologies.
- Designed and implemented a Python controls program to evaluate onboard telemetry and camera information to generate the motor commands necessary to follow a moving target at a fixed distance in 3-D space.

### Web Application, Personal: Weather Applet

- Implemented Google's Geolocation API and the ForecastIO API to develop a full stack forecasting applet.
- Leveraged PHP, MySQL and JQuery to access and visualize current, past and future trends.

#### Education

Ian. 2016

### Northeastern University, Boston MA

Bachelor of Science in Computer Engineering with a minor in Computer Science

GPA: 3.76, Magna Cum Laude

Eta Kappa Nu IEEE Honors Society, University Honors Program, Dean's Merit Scholarship Recipient

Courses: Machine Learning • Algorithms • Object Oriented Design • Optimization Methods •

Programming Languages • Computer Architecture • Computer Networks • Computer Security • Vision and Robotics • Software Development • Discrete Math • Differential Equations • Fundamentals of Computer Science • Engineering Problem Solving with C++.

Clubs: NU Hacks, Wireless Club, Toastmasters International, NUTV Marketing Director.

*June 2012* 

### Palisades Charter High School, Los Angeles CA

GPA: 4.02

# Skills

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Languages: High Proficiency in: Java, C/C++. Working Proficiency in: Javascript (Node/Express), CSS,

Python, SQL.

Tools: Git, Confluence, Jira, VMware, MySQL, Labview, OS X, Linux.

#### Presenting

<u>Toastmasters</u>: Active participant in both the Northeastern & Santa Monica chapters.

NUTV: E-Board Marketing Director for the university's video production club. Executive Producer,

director and writer for the Entertainment department. Host for the bi-annual award show.

#### Misc.

UK and US citizen, limited working fluency in Spanish, cyclist, comedy enthusiast.