Joshua Field

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✓ github.com/joshField 1 linkedin.com/in/joshafield in

Education

Northeastern University | Candidate for BS in Electrical & Computer Engineering Boston, MA

GPA: 3.88 | Graduation Date: May 2022

Relevant Courses: Digital Design & Computer Architecture | Circuits & Signals | Embedded Design |

Discrete Structures | Calculus 3 | Differential Equations

Activities: IEEE | AIAA | NUAV Project Lead

Awards: Dean's List | NASA Space Apps Challenge - Boston (1st Place)

Arcadia High School

Arcadia. CA

GPA: 3.93 | **SAT:** 2120 **Graduation Date:** June 2017

Activities: Boy Scouts | Marching Band Section Leader | Varsity Goalkeeper | Taekwondo 3rd Degree

Awards: Eagle Scout | National Merit Commended Scholar | AP Scholar with Distinction

Experience

College of Engineering Connections Computer Lab | Lab Assistant Boston, MA

Jan '18 - Present

Monitor lab and equipment usage

• Assist students with computer applications and maintain lab cleanliness

California Institute of Technology | Research Engineering Intern

May '18 - Aug '18

Pasadena, CA | Python, AWS, Arduino, Android Studio, SQLite

 Developed a smart maintenance sensor network that monitors the treatment of waste water using an Arduino & Raspberry Pi

• Coded an Android app using Android Studio, NoSQL & Amazon Web Services (DynamoDB, IoT, Cognito, Lambda)

Northeastern University ResMail | Mail Services Associate Boston, MA

Oct '17 - Dec '17

• Sorted and delivered mail, as well as audited and updated the university database

Johns Hopkins Engineering Innovation | Summer Course

Jun '16 - Aug '16

Pasadena, CA | SolidWorks

- Built the strongest spaghetti bridge in course competition using truss analysis
- Reverse engineered and rebuilt a light sensing robot

Skills

Programming: Java, C++, Python Familiar with C, C#, MATLAB, LaTeX, SQLite, Verilog, HTML, CSS Computer: Android Studio, AWS, PSpice, Simulink, SolidWorks, AutoCAD, Adobe Photoshop

Projects

Piezoelectric Keyboard

Fall '17

Wiimote Robotic Arm

C++, Simulink, FPGA

Spring '18

Arduino, SolidWorks, AutoCAD

- Attached piezoelectric sensors to a keyboard and measured the power generated with an Arduino
- Presented at the 2018 Northeast ASEE Conference
- Created a Simulink program to generate PWM signals on a ZedBoard FPGA, to control servos in the arm
- Coded a C++ program to connect the bluetooth signals of a Wiimote to interact with the FPGA