

# BRIAN LIN

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Duke University
Pratt School of Engineering
Class of 2018
GPA 3.54/4.00

### **PROFILE**

Duke sophomore with his mind on robotics, AI, computer science, wearables, calligraphy and keyboards

# SKILLS

LANGUAGES

Java | Swift HTML | CSS | JavaScript MATLAB | R

WEB DEV & IT

Amazon Web Services | Digital Ocean LAMP | CentOS | Ubuntu | Bash WebRTC | Wordpress.org | Parse Github | Bitbucket | Fogbugz

# ELECTRONICS

Soldering | Arduino Raspberry Pi | Photon Code Composer Studio | SIMULINK

# OTHER

Blender 3D Modeling and Design 3D printings | Corel Draw Photoshop | Illustrator Logic Pro | Garage Band

# INTERESTS

# OUTDOORS

Long Distance Running IM and Pickup Soccer Hiking | Kayaking

ART & MUSIC

Piano and Guitar Covers Street Sketching | Watercolor Calligraphy

# RELEVANT COURSEWORK

Data Structures & Algorithms (A) | Multivariable Calculus (A-) | Differential Equations (A-) Signals and Systems (A)

Next semester: Computer Architecture | Intro to AI | Software Design and Implementation

#### EXPERIENCE

# Electronics Specialist and Webmaster, Duke Robotics Club August 2015 - Present

- Building an autonomous underwater robot for the AUVSI RoboSub competition
- Designing our motor control board and overall computing stack
- Currently setting up Wordpress.org on our website (Digital Ocean Ubuntu)

# Computer Science Research, Duke CS Department August 2015 - Present

- Built and tested a wearable text-recognizing camera using a Raspberry Pi, Narrative Clip and various sensors (light, accelerometer, infrared)
- Focused on energy and accuracy tradeoffs when using sensors to capture images
- Paper has been submitted to the annual MobiSys conference (pending approval)

# Web Development Intern, ClairVista LLC 2015 Summer

- Built a WebRTC browser test app as a diagnostics tool for video chat software
- Worked with an Amazon EC2 LAMP stack, Polymer 1.0, JavaScript, and REST
- Online product documentation generation usiong LaTeX and Python's Sphinx

# Research Assistant, Duke Lemur Center Div. of Fossil Primates August 2014 - December 2015

- Performed MicroCT scans of fossils followed by 3D rendering and processing (fitting fragments together, isolating specific bones, and uploading scans to MorphoSource.org)

# Research Intern, Northwestern University Medical School 2012 Summer

- Explored the relationship between pesticide use by farmers and incidence of cancer
- Statistical analysis (modeling, T-tests, etc.) using the R statistical programming language

# SIDE PROJECTS -

Duke Studies (iOS app) Fall 2015 - January 2016 launch

Using Duke's course database to create a studymate-finding service that matches students in groups, project is sponsored by the Office of Information and Technology Duke Political Review Webmaster

Summer 2015 - Present

Rebuilt and redesigned the Duke Political Review's website using Wordpress.org

#### Handwiring Mechanical Keyboards Summer 2015 - Present

When I have free time and access to a soldering iron, I enjoy building mechanical keyboards from scratch. This involves laser cutting an acrylic case, wiring together every single keyswitch, adding diodes to distinguish between key presses, and flashing firmware onto a 'Teensy' USB microcontroller.