

# Conrad Mitchell

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## Education

### Duke University

Class of 2020

B.S in Computer Science

Minors in Electrical and  
Computer Engineering and  
Philosophy

GPA 3.67

### Chagrin Falls High School

Class of 2016

GPA 4.45

## Honors and Awards

### Dean's List

#### Duke University

Fall 2016, Fall 2017

### Computer Science Award

#### Chagrin Falls High School

Spring 2016

## Languages

Java, Python, C, SQL, MATLAB,  
JavaScript, Machine Language  
(MIPS), HTML, CSS

## Technical Skills

Git, Command Line, Virtual  
Machines, Google Cloud  
Platform, Networks and IT,  
EAGLE, CAD, Jupyter Notebook,  
Heroku, Tableau, Logisim

## Relevant Courses

- Data Structures and Algorithms
- Software Implementation and Design
- Everything Data
- Computer Design and Architecture
- Multivariable Calculus
- Linear Algebra
- Differential Equations
- Electrical Signals and Systems
- The Python Mega Course (Udemy)
- The Complete Web Developer (Udemy)

## Work Experience

### Security Systems Engineer Intern: M.C. Dean

Mountain View, CA | May 2018 – August 2018

Supported the integration of security at Google Headquarters by automating the improvement of company-wide employee badging system and security cameras (Python and Google Cloud Platform), conducting analysis of door and card reader data (SQL), and designing testing procedures and workflows for technology evaluations (VMWare and Google Suites)

### Project Management Intern: Department of Defense

Vingerkraal, South Africa | May 2017 - August 2017

Contracted providers, designed hardware, curriculum, and assembly processes, trained local teachers, and personally managed a \$20,000 DoD funded initiative to distribute do-it-yourself solar generators and educate a community of 400 on the science and construction of solar units

## Research

### Sea Turtle Lighting Project Lead: Duke Conservation Tech

Durham, NC | September 2017 - Present

Designing and fabricating prototypes of LED devices (EAGLE) to deter sea turtles from swimming into fishing nets as part of a World Wildlife Foundation sponsored project

### Elephant Fencing Researcher: Adventures with Elephants

Limpopo, South Africa | September 2017 - May 2018

Designed and conducted analysis (CAD) on a new type elephant fencing for a South African conservation organization seeking to end human wildlife conflict in Namibia

### Energy Generation Researcher: Duke Bass Connections

Durham, NC | January 2018 - May 2018

Conducted functional analysis and visualized power output of wave powered variable capacitive energy generators (MATLAB) and presented at the North Carolina State Energy Conference

## Volunteering

### 1401 Restoration Volunteer: Computer History Museum

Mountain View, CA | May 2018 – August 2018

Assisted in maintenance and educational initiatives relating to the IBM 1401 Business Computer

### Scholars 2 College Tutor: Emily Kyzewski Center

Durham NC | September 2017 - Present

Tutoring math and physics and providing homework help for local high school students

### Volunteer Consultant: Koolbridge Solar LLC

Durham, NC | August 2017 - March 2018

Performed studies on market trends, consumer needs, and the current technical landscape of the inverter market for a solar energy start-up and won a consulting symposium hosted by Applied Predictive Technologies for team findings

## Projects

### Evolutionary Neural Network

Santa Clara, CA | May 2018 - Present

Creating a simple neural net from scratch that receives input from a game environment and teaches itself how to play by evolution and partner learning (Python)

### Game Authoring Engine: Duke University

Durham, NC | January 2017 - May 2018

Applied Agile principles to a 10-person team and implemented a 20,000-line program that uses the Entity Component design pattern to allow users to make, store and play games (Java, Git)

### North Carolina Election Prediction: Duke University

Durham NC | January 2018 – May 2018

Scraped and cleaned census data to train a Bayesian classification algorithm (Jupyter Notebook and SKLearn) to predict voting outcomes and presented findings (Tableau)

### Interdisciplinary Design Challenge: Duke University

Durham NC | January 2017 – May 2017

Built an autonomous robot that network with others (Arduino) and won a 100 person challenge