# **David Halpern**

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#### **EDUCATION**

**Brown University,** GPA: 3.75/4.0, Concentration GPA: 3.86/4.0

Providence, RI | Expected Graduation May 2020

Concentration: Sc.B Mathematics - Computer Science

Relevant Coursework: Computer Science: An Integrated Introduction 0170 and 0180, Intro to Computer Systems, Machine Learning, Multivariable Calculus, Honors Linear Algebra, Abstract Algebra I and II, Statistical Inference I, Intro to Engineering I and II

Francis W. Parker School, 3.82/4.00 GPA Chicago, IL | Class of 2016

ACT Overall: 34, English: 34, Math: 33, Reading: 33, Science: 35

SAT Subject Tests: Math II: 790, Physics: 750

### **ENGINEERING & COMPUTER EXPERIENCE**

### **Computer Science Projects, Programmer**

Providence, RI | 09/2015 – Present

- Created a procedurally generated maze game using Python's Pygame
- Designed a dynamic memory allocator in C
- Programmed a search engine in Scala that implemented Google's PageRank algorithm

#### **Humans To Robot Lab,** Research Assistant

Providence, RI | 05/2017 - Present

- Created face tracking demo for the Baxter Research Robot (<a href="https://github.com/h2r/baxter\_face\_tracking\_demos">https://github.com/h2r/baxter\_face\_tracking\_demos</a>)
- Assisted with a scan of entire IPv4 looking for internet-facing Robot Operating System ports for a security project
- Aided in developing/researching experiments related to Abstract Markov Decision Processes (AMPDs)

### Snapsheet, Computer Science Intern

Chicago, IL | 06/2018 - 08/2018

- Responsible for the "Snap-Hub" API and frontend development, streamlining workflows for our Github projects
- Completed all planned internship assignments in about half the expected time

#### **RobotCity Workshop,** Service Technician/Costumer Service

Chicago, IL | 06/2011 – 09/2016

- Worked with an Electrical Engineer to produce in-house robot kits and displays
- Led the instruction of workshops, birthday parties, and summer camps
- Opened, closed, and operated the store on my own at least once a week

#### Museum of Science and Industry, Volunteer

Chicago, IL | 08/2012 - 06/2016

- Logged over 700 hours into the Science Minor/Achiever program
- Designed experiments to be presented to guests

# Milwaukee School Of Engineering Discover Camps, Attendee

Milwaukee, WI | 07/2015 - 09/2015

• Took courses in a variety of engineering topics and designed engineering related projects everyday

### **COMMUNICATION EXPERIENCE**

# RobotCity Workshop, Service Technician/Costumer Service

Chicago, IL | 06/2011 – 09/2016

- Taught 30 students/month basic circuitry and mechanics
- Organized event schedule, fielded phone calls, and handled business transactions

## Museum of Science and Industry, Volunteer

Chicago, IL | 08/2012 - 06/2016

• Presented over 250 hours of scientific experiments to museum guests

## **Graduation Speech, Speaker**

Chicago, IL | 06/2016

• Was the male student speaker at my high school graduation (https://vimeo.com/170662224)

### LEADERSHIP EXPERIENCE & AFFILIATIONS

# Computer Science 0180, Teaching Assistant

Providence, RI | 11/2017 – 05/2018

- Held weekly office hours and lab hours
- Lead instruction on data-structures and algorithms in Java and Scala

#### **Inspired Youth,** Volunteer Classical Piano Tutor

Chicago, IL | 05/2015 – 09/2016

• Taught piano lessons to students between kindergarten and fourth grade

# FIRST Robotics, Member

Chicago, IL | 09/2012 - 06/2014

• Built robots to compete in the For Inspiration and Recognition of Science and Technology (FIRST) Robotics competitions

## SKILLS AND INTERESTS

**Technical Skills:** Python, Java, C, Matlab, Scala, Ruby, Javascript, Ocaml, Scheme, Robot Operating System, Linux **Interests:** Biking, Snuggies, Rollerblading, Video Games, Diabolos, Rubik's Cubes, Sudoku, Classical Piano (13 years)