# William R. Howard Matchen

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# **Education**

- Carnegie Mellon University Class of 2017
  - Bachelor of Science in Physics Computational Track
  - Minor in Computer Science

## Coursework

- Carnegie Mellon University
  - Graph Theory
  - Probability Theory and Random Processes
  - Great Theoretical Ideas in Computer Science
  - Matrices and Linear Transformations
  - Advanced Computational Physics
  - Quantum Physics
  - Numerical Methods
- Coursera

Machine Learning - Implemented Neural Networks, Summer 2015 SVM's, PCA, Anomaly Detection and Recommender Systems. Gained knowledge of the Octave/Matlab languages.

## **Skills**

- Programming Languages: Proficient in Python, C; Some experience in HTML/CSS, Java, Processing
- Fluent in Spanish

# **Research Experience**

Software Consultant for Disney Research

Summer 2015

Developed Python scripts to parse email databases for emoticon usage.

Analyzed social interactions in corporate hierarchy. Work was mostly self-taught.

Learned to work with large datasets and multiple software libraries.

### **Activities**

- Carnegie Mellon University
  - Alpha Epsilon Pi Fraternity Alpha Kappa Chapter

Community Service Chair
Philanthropy Chair
2014

• Chabad In-House Coordinator Fall 2014 - Present

- Meet weekly with local family to plan, prepare, and serve meals to groups of more than thirty people.
- Board Member of Jewish Students Association 2014

Musical Director / Recruitment Chair of C#, an a cappella
 Volunteer for 1000Plus
 Fall 2013 - Fall 2014
 Fall 2013 - Present

• Twice-annual event that engages Carnegie Mellon students in over one thousand person-hours of assisting local groups in need.

### **Honors**

• Thomas J. Watson Memorial Scholarship Recipient

2013 - 2017