# **EMMA OBERSTEIN**

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#### **EDUCATION**

Dartmouth College, Hanover, NH

**June 2018** 

Bachelor of Arts, Major in Computer Science

GPA 3.81/4.0

Relevant Coursework: Algorithms, Problem Solving Via Object Oriented Programming, Discrete Mathematics in Computer Science, Software Design and Implementation, Smartphone Programming, Human Computer Interaction, Website Development Honors/Awards: 3 Citations for Academic Excellence, Neukom Scholar, Presidential Scholar, Honors Group

## **TECHNICAL SKILLS**

Programming: HTML, CSS, Javascript, Java, C, C#, Python, Android Development, Swift, MySQL

Operating Systems: Mac OS X, Unix/Linux

Design: Photoshop, Maya, Muse

## EXPERIENCE

## Digital Arts, Leadership, & Innovation Lab, Hanover, NH

September 2015 - Present

Website Developer

- Built a prototype for DartDiagnose, a web application that assists doctors in diagnosing patients with rare diseases.
- Developed an algorithm in Javascript to rank disease probability based on user-inputted symptoms.
- Collaborated with doctors to polish the user flow and design of the prototype application.

### HackDartmouth, Hanover, NH

September 2015 - Present

Director of Technology

- Maintained and updated the official website for HackDartmouth, Dartmouth College's annual student-run hackathon.
- Taught an "Introduction to Website Development" workshop focusing on the basics of HTML, CSS and Bootstrap.
- Mentored competing students in website development, Android development, iOS development and Visual Studio.

## Department of Computer Science, Dartmouth College, Hanover, NH

March 2016 - Present

Teaching Assistant

- Gave feedback for and graded student assignments in Smartphone Programing and Software Design and Implementation.
- Held office hours and answered relevant questions on Piazza, an online question and answer platform.

#### Department of Computer Science, Dartmouth College, Hanover, NH

June 2016 – Present

Presidential Scholar Research Assistant

- Contributed to the early stages of a mobile health obesity wellness intervention for elderly obese adults.
- Developing an improved step and distance counting component in C for Amulet, a novel wrist-wearable device for mobile health applications with high security, efficiency and battery life.

#### **PROJECTS**

## WeatherWear February 2016 – March 2016

Designed and implemented an Android application that makes appropriate outfit suggestions based on the weather:

- Implemented a MySQL database to save information regarding a user's closet.
- Integrated alarms to allow users to be given an outfit to wear when they choose to wake up.
- Developed an algorithm to display and allow users to edit an appropriate outfit based on season, weather and availability.

Search Engine May 2015

Designed and implemented a search engine in C consisting of three main components:

- The crawler component crawls web files given a seed URL.
- The indexer component creates an inverted index of words per HTML page.
- The query component ranks and displays URLs given a search terms from a user.

## **ADDITIONAL ACTIVITIES**

#### Dartmouth CoderDojo, Windsor, VT

January 2015 - Present

Co-Chair

- Mentored local middle/high school students with a passion for technology.
- Assisted students with various projects including Scratch games, website design and Raspberry Pi arcade system.

## Kappa Delta Sorority - Eta Xi Chapter, Hanover, NH

March 2016 - Present

Vice President of Finance

• Managed a \$105,000 budget and handled all aspects of the sorority's finances.