

# Alden Hallak

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## EDUCATION

### UNIV. OF PENNSYLVANIA

ENGLISH AND COMPUTER SCIENCE  
Expected May 2020  
Philadelphia, PA

### BA IN COMPUTER SCIENCE AND ENGLISH

Expected May 2020  
College of Arts and Sciences

### LOWER MERION HIGH SCHOOL

Merion Station, PA  
Graduated with Honors

## COURSEWORK

CIS 450 Database and Info. Systems  
CIS 419 Applied Machine Learning  
CIS 350 Software Design & Engineering  
CIS 331 Intro. to Networks & Security  
CIS 320 Intro. to Algorithms  
CIS 262 Automata Computability  
CIS 240 Intro. to Computer Systems  
CIS 121 Data Structures and Algorithms  
CIS 160 Math. Foundations of C.S.  
CIS 120 Prog. Languages and Techniques  
Math 114 Calculus 3

## SKILLS

### PROGRAMMING

Experienced:

Python • Java • C# •  
HTML/CSS/JavaScript/JQuery • C

Familiar:

BASH • C++ • MySQL •  
OCaml • Scikit-Learn • PHP/Laravel •  
Objective-C • Cordova/Phone Gap •  
Node.js • TensorFlow

### LANGUAGES SPOKEN

English • French • Croatian • Arabic

## LINKS

Github: [github.com/aldenhallak](https://github.com/aldenhallak)  
LinkedIn: [linkedin.com/in/alden-hallak](https://www.linkedin.com/in/alden-hallak)  
Personal Website: [AldenHallak.com](http://AldenHallak.com)

### WEBSITES WORKED ON

Arteric.com  
WQHSRadio.org  
HarrisonMeyer2017.com  
[seas.upenn.edu/halal/](https://seas.upenn.edu/halal/) (the halal zone)

## WORK EXPERIENCE

### GOOGLE | SOFTWARE ENGINEERING INTERN

May 2019 - Aug 2019 | New York, NY

- Using Google's Mediapipe to build applied ML pipelines on Hangouts Meet.

### INFOSYS | INSTEP INTERN (MACHINE LEARNING/NLP)

Summer 2018 | Bangalore, India

- Built and evaluated vector based and tensor based algorithms for information retrieval.
- Set up and maintained TensorFlow-Serving and Solr Servers.
- Wrote a REACT-API with Flask.
- Interfaced with the API using a demo built in React.js
- Worked with a team to build a ML Search Re-Ranking service.

### ARTERIC | JUNIOR SOFTWARE DEVELOPER/NLP INTERN

Summer 2017 | Summit, NJ

- Developed software that utilized machine learning and natural language processing to analyze, categorize, and group pay-per-click / AdWords query data with the goal of identifying topically similar queries.
- Used PHP / the Laravel framework and MySQL to store and show query data, which was generated with AdWords data input into Python / Scikit-Learn.
- Performed miscellaneous tasks such as data analysis, quality control testing, and clerical work at the request of Arteric personnel.
- A write up of the tool I helped create can be found here: [goo.gl/bQVQR8](https://goo.gl/bQVQR8)

### UNIVERSITY OF PENNSYLVANIA | TEACHING ASSISTANT - CIS 110

Jan 2017 - Present | Philadelphia, PA

- Teach introductory Computer Science in recitation once a week.
- Hold office hours twice a week.
- Grade and contribute to homework.

## ACTIVITIES

### UNIV. OF PENN | RESIDENTIAL ADVISOR | 18-CURRENT

Working as a Residential Advisor, developing a sense of community for 25 culturally diverse freshmen who are new to the University of Pennsylvania.

### UNIV. OF PENN | RESEARCH ASSISTANT | 2019

Performing Machine Learning research under Mayur Naik of the University of Pennsylvania.

### TECH IT OUT! PHILLY | MENTOR, DIRECTOR | 2017-19, 19-20

I lead Tech It Out Philly, a student-run organization responsible for teaching underrepresented students CS by creating websites about social issues.

### WQHS RADIO | SYSTEMS ADMIN, RADIO DJ | 2017-20

An elected board position where I focus on maintaining and updating the technical side of WQHS Radio, making sure the servers run and constantly adding additional functionality to the WordPress site: [wqhsradio.org](http://wqhsradio.org).

### THE DAILY PENNSYLVANIAN | DEPUTY | 2018-CURRENT

I create satirical videos for Under The Button, under the Daily Pennsylvanian.

### MISC. HOBBIES

I play bassoon, saxophone, and piano.

I like home automation, currently running HomeAssistant on a Raspberry Pi in my house to control the locks and lights.

I enjoy reading and good comedy as well.