

# Joseph Freedman

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## EDUCATION

### MICHIGAN STATE UNIVERSITY

#### MS IN COMPUTER SCIENCE

Expected May 2019  
East Lansing, MI

#### BS IN COMPUTER SCIENCE

Graduated Dec 2017  
East Lansing, MI  
GPA: 3.68 / 4.0

## LINKS

Github:// [jfreedman0](#)  
LinkedIn:// [jfreedman0](#)  
Personal:// [jfreedman.org](#)

## COURSEWORK

### GRADUATE

Pattern Recognition  
Data Mining  
Computer Vision  
Artificial Intelligence\*  
Neural Networks\*  
Computer Security\*

\*Denotes currently enrolled

### UNDERGRADUATE

Object Oriented Programming  
Algorithms and Data Structures  
Computer Architecture  
Advanced Algorithms  
Big Data Analysis  
Databases  
Computer Networks

## SKILLS

### PROGRAMMING AND TOOLS

Most Comfortable:

- Python
- Jupyter Notebook
- Pandas
- Numpy
- Unix Shell
- Matlab

Familiar:

- C/C++
- Javascript
- SQL
- AWS
- Kubernetes

## EXPERIENCE

### BLUE MEDORA

#### SOFTWARE ENGINEERING INTERN

May 2018 – Present | Grand Rapids, MI

- Implemented a nearest neighbor search on monitored resource data to find similarities between resources
- Built a monitoring plugin to collect metrics about a host system to analyze impact of monitoring tools

### MICHIGAN STATE COLLEGE OF ENGINEERING

#### TEACHING ASSISTANT FOR CSE 422, COMPUTER NETWORKS

Jan 2018 – May 2018 | East Lansing, MI

- Wrote and implemented socket programming hangman game for students to learn TCP/UDP programming
- Maintained frequent communication with instructor to manage course topics and grades for 60+ students
- Held weekly office hours to assist students with homework and projects

#### TEACHING ASSISTANT FOR CSE 231, INTRODUCTION TO PROGRAMMING

Aug 2016 – Dec 2017 | East Lansing, MI

- Facilitated weekly lab sessions for students focusing on learning basic programming concepts
- Communicated with a team of TAs to ensure consistency in materials for a class of 600+ students

### HUMANA

#### APPLICATIONS ENGINEERING INTERN

May 2017 - Oct 2017 | Louisville, KY

- Created a predictive model with PySpark to classify members based on use of Humana's digital resources
- Built and published a Nuget package in .NET to aggregate multiple data visualizations into a cohesive view

### MICHIGAN STATE UNIVERSITY

#### RESIDENT ASSISTANT

Jan 2015 - May 2016 | East Lansing, MI

- Served as a resource for residents and provided necessary information for their success as students
- Engaged with a team of RAs to ensure a safe and inclusive community for all residents

## PROJECTS

### YELP REVIEW PREDICTION

- Built and tested models to predict the star value of a given Yelp review. Set up Jupyter Notebook server using AWS for most effective collaboration with teammates. Built with Python and sci-kit learn.

### DASH PICTURES

- Hacked Amazon Dash Button to use as a remote shutter button for an iPhone camera. Built with Python and a jailbroken iPhone.