# Joseph Freedman

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## **EDUCATION**

**Michigan State University** 

East Lansing, MI

Master of Science, Computer Science

May 2019

Bachelor of Science, Computer Science - GPA 3.68/4.00

Dec 2017

## **EXPERIENCE**

Blue Medora Grand Rapids, MI

Software Engineering Intern

May 2018 - Aug 2018

- Implemented a nearest neighbor search on monitored resource data to find similarities between resources
- Utilized D3 to visualize graph of connected resources to better illustrate similarities and differences

## Michigan State College of Engineering

East Lansing, MI

Teaching Assistant for CSE 422, Computer Networks

Jan 2018 - May 2018

- 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 (Python)

Aug 2016 - Dec 2017

- 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 Louisville, KY

Applications Engineering Intern

May 2017 - Oct 2017

- 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

East Lansing, MI

Resident Assistant (RA)

Jan 2015 - May 2016

- 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.

### TechSmith Director (Senior Design)

Web application with a user friendly interface for creating video projects using voice input. Built with .NET Core MVC and leveraged Microsoft Cognitive Services for voice input and natural language processing.

#### **Dash Pictures**

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