# Abhinav Madahar

480 · 399 · 4228 ♦ abhinav@abhinavmadahar.com ♦ abhinavmadahar.com ♦ github.com/abhinavmadahar

#### INDUSTRY EXPERIENCE

Academia.edu

 $July\ 2021 - March\ 2022$ 

Software Engineer San Francisco, California

- · Helped develop Academia's core web app, focusing on the new courses product
- · Worked across the stack, using React with Typescript on the frontend and Ruby on Rails on the backend
- · Ran A/B tests to find which emails resonated the best with users

Johnson & Johnson

April 2020 — September 2020

Titusville, New Jersey

- Data Science Co-op
- $\cdot$  Predicted glaucoma with 81% accuracy, 85% sensitivity, and 75% specificity using an RNN
- $\cdot$  Previous ML models for glaucoma required retinal scans, but this is the first in the world which doesn't
- · The model reads a patient's drug usage, disease history, basic medical data, and medical device usage

Oracle

May 2019 — August 2019

Santa Clara, California

Data Science Intern

- · Replaced existing 91% MASE model with my 95% MASE model
- · Developed CNN-based, LSTM-based, and GRU-based time series models to predict cloud service usage
- · Gave model's forecast to business side so they can use it to buy sufficient GPUs for upcoming quarter

Johnson & Johnson

May 2018 — August 2018

Medical Devices Data Science Intern

Somerville, New Jersey

- · Used RNNs and CNNs to recognize human activity using wearable sensor data at 95% accuracy
- · Predicted post-op complications using ML techniques like naive bayes with real-world electronic health data

#### RESEARCH EXPERIENCE

Research Experience for Undergraduates (REU) under James Abello

May 2020 — September 2020

- · Explored plotting very large network graphs using summarization techniques
- · Applied techniques to a graph-based data set of short stories to find literary patterns and clusters

### Research Assistant under Sungjin Ahn

September 2018 — May 2019

· Learned about reinforcement learning with planning agents by reading research papers and replicating results

#### Research Assistant under Gerard de Melo

September 2017 — September 2018

 $\cdot$  Introduced to machine learning, focusing on using deep learning with RNNs to summarize documents

## **PROJECTS**

#### Bike Ridership Data Visualization Project

January 2020 — May 2020

- · Developed website that visualizes bike ridership in NYC for graduate CS class using plotly and mapbox
- · The professor praised my development and hired me as a research assistant to continue working on this project

ASSIST January 2018

- · Wrote a machine learning model which predicts the likelihood of surviving a stroke using Keras
- · Won the HopHacks 3<sup>rd</sup>-place award, a Google award, and a John Snow Labs award

#### **EDUCATION**

**Rutgers University** 

September 2017 — May 2021

B.Sc. with double major in Computer Science and Mathematics

New Brunswick, New Jersey