# Abhinav Madahar

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

#### INDUSTRY EXPERIENCE

Academia.edu

July 2021 — March 2022

San Francisco, California

Software Engineer

· 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

- · Predicted glaucoma with 81% accuracy, 85% sensitivity, and 75% specificity using an RNN
- · 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
- · Applied the same model to predict cataract onset and got promising results

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
- · Automated data processing pipeline in Python which was previously done manually in Excel

Johnson & Johnson

May 2018 — August 2018

Somerville, New Jersey

Medical Devices Data Science Intern

- · 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)

May 2020 — September 2020

Rutgers University

- · 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

University Lab

September 2017 — September 2018

Research Assistant

Research Assistant

Rutgers University

· Introduced to machine learning, focusing on using deep learning with RNNs to summarize documents

#### CLASS 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

## **EDUCATION**

**Rutgers University** 

September 2017 — May 2021

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

New Brunswick, New Jersey