Abhinav Madahar

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DATA SCIENCE EXPERIENCE

Johnson & Johnson April 2020 — September 2020
Data Science Co-op *Titusville, NJ, USA*

- 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
Data Science Intern *Santa Clara, CA, USA*

- 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
Medical Devices Data Science Intern *Somerville, NJ, USA*

- 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

WEB DEVELOPMENT PROJECTS

Guesstimoji *github.com/abhinavmadahar/guesstimoji* May 2021 — Present

- Developed web game using React with Redux, Node with Express, and MongoDB
- Worked on both frontend and backend to add features, including a button to restart the game after a player wins
- Used web sockets to communicate between clients and server

Movie Recommendation Website *github.com/abhinavmadahar/cs550-project* Spring 2021

- Developed front-end and back-end for website that recommends movies
- Used ECMAScript 6 on the front-end and Flask on the backend

Bike Ridership Visualizer Website Spring 2020

- Developed website that visualizes bike ridership in NYC for graduate CS class
- Used Flask for Python on the backend and Mapbox with Plotly on the frontend
- The professor praised my development and gave me a paid lab position over the summer

RESEARCH EXPERIENCE

Research Experience for Undergraduates (REU) Summer 2020
Research Assistant *github.com/abhinavmadahar/abello* 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
- Used Python with NetworkX

EDUCATION

Rutgers University-New Brunswick September 2017 — May 2021
B.Sc. with double major in Computer Science and Mathematics 3.4 CS GPA