Ajay Patel

(973)-617-7032 | ajpat8703@gmail.com | Warren, NJ | Portfolio | LinkedIn

EDUCATION

University of California, Berkeley January 2025 – Present

Master of Information and Data Science

- Relevant Courses: Intro to Data Science Programming, Research Design and Applications for Data and Analysis

University of Rochester August 2021 – December 2024

Bachelor of Science, Data Science Major – GPA: 3.99/4.00

- Relevant Courses: Tools for Data Science, Data Structure and Algorithms, Linear Algebra, Intro to AI, Database Systems, Data Mining, Statistical Modeling, Time Series Analysis
- Teaching Assistant in the Data Science department, leading study sessions and grading coursework

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EXPERIENCE

Los Angeles Dodgers, Los Angeles, CA May 2024 – August 2024

Baseball Strategy and Information Intern

- Created and led the integration of proprietary sliding metrics in Python and SQL from 3D tracking data
- Developed and presented on statistical models in R which analyzed player development across all MLB teams

Optum, Basking Ridge, NJ June 2023 – August 2023

Technological Development Program Intern

- Created a web application using React and Node.js frameworks to host behavioral therapy data to improve accessibility and quality of data for therapists and their patients
- Developed back-end connectivity through SQL and API endpoints and improved front-end design for users utilizing React, CSS, and HTML

Shot Quality, Warren, NJ May 2022 – Dec 2022

Data Science Intern

- Implemented numerous projects to improve our core algorithms, functionalization and understanding of contemporary basketball data through R
- Collaborated daily with team members, setting and meeting deadlines, and executing code scripts

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EXTRACURRICULARS & PROJECTS

University of Rochester Independent Studies, Rochester, NY August 2023 – December 2024

Research Assistant

- Analyzed possible political biases in AI image tools in Python using computer vision and scraping techniques
- Created a F1 race simulator to identify effective pit stop strategies using tree-based modeling

NFL Big Data Bowl, Indianapolis, IN November 2022 – March 2023 & November 2023 - February 2024

Finalist (2023) / Runner-Up

- Presented work on an expected pass rush metric using XGBoost analyzing team schemes at the NFL Combine
- Trained a PyTorch CNN to predict yards after the catch based on spatial data of all players and created subsequent scouting reports and team-analysis charts

Exit Velocity Over Expected, Warren, NJ July 2022

Creator

- Trained a XGBoost model to predict exit velocities of batted balls in MLB and explained my methodology
- Created a Shiny App to host the resultant data and effective visuals made through ggplot2, gt, and more

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SKILLS & LINKS

- R, Python, Java, Javascript (React, Node), Postman, SQL, Excel Predictive Modeling, Bayesian Statistics
- Github & Medium