ADITYA RATHOD

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Fremont, CA / Richardson, TX

Education

The University of Texas at Dallas, Richardson, TX — Aug 2019 – May 2023
B.S. in Computer Science, Minor in Business Intelligence & Analytics — **3.93/4.0 GPA**
National Merit Scholar / National Merit Scholarship Recipient
***Selected coursework**: Data Structures/Algorithms, Advanced Algorithms, C++ & Linux, Linear Algebra, Machine Learning, Databases & SQL*

Technical Skills

Languages: JavaScript/TypeScript, Java, Python, HTML/CSS, C++, SQL, R
Frameworks/Tools: React, Redux, NodeJS, Jest, Express, React Native, Spring Boot, Pandas, NumPy
Databases: MongoDB, MySQL

Work Experience

Software Developer Intern, Paycom Payroll LLC, Oklahoma City, OK — **May 2021 – Aug. 2021**

Software Developer Intern, RealPage Inc., Richardson, TX — **May 2020 – Aug. 2020**

- Created hybrid, cross platform redesign of Leasing Tablet mobile app, using React Native, **doubling the number of platforms supported**
- Implemented API in Spring Boot/Java, **unifying data access to 3 different data sources** used in the Leasing Tablet application, including a novel ID verification API
- Technologies used: JS/TypeScript, React Native, Redux, Jest, Java, JUnit, Spring, PostgreSQL

Summer Undergraduate Researcher, UT Dallas, Richardson, TX — **Jun. 2019 – Aug. 2019**

- Learned basics of deep learning by developing a sequence-to-sequence model for abstractive news summarization in Keras and TensorFlow
- Collected novel training dataset of **25,000 news articles** using custom scraper written in Python
- Presented findings at a poster symposium with computer science faculty in attendance

Projects

Comparison of Current Online Portfolio Selection Algorithms *(github.com/ACM-Research/online-portfolio-selection)*
Technologies: Python, NumPy, Pandas, Matplotlib, SciPy

- **Led team of five** in comparing current strategies to optimize asset portfolios on market data
- Created data preprocessing pipeline with the ability to process **3.1 million+ market ticks** in under 2 mins
- Designed backtesting framework to generate strategy comparisons, optimized core backtesting method by **150%**, enabling the team to backtest on **weeks of tick-resolution data in just 20-30 minutes**

ACM Hacktoberfest: Dynamic Website for 300-Attendee Online Event *(hacktoberfest.acmutd.co)*
Technologies: React, NextJS, Firebase, TailwindCSS

- Successfully developed and deployed a dynamic, on-brand event website from scratch in **2 weeks** while **collaborating with a team of 20+** designers, copywriters, and event organizers
- Key features: dynamically schedule, real-time leaderboard, CI/CD, dynamically generated event pages

Liform: Medical Billing Analytics Application (HackRice 9) *(https://devpost.com/software/liform)*
Technologies: React, NextJS, NodeJS, Express, MongoDB, Python

- **Led team of four** in creating a medical treatment cost comparison app in **under 48 hours**
- Developed frontend UI, hospital data processing pipeline, and backend API for price data

Activities

UT Dallas Association for Computing Machinery, Research Lead — Apr. 2020 – Present
Currently developing and directing **10-week research projects** in collaboration with professors **for 4-6 students** every semester to introduce them to undergraduate research (15% acceptance rate for project participants). Project topics: quantitative finance, deep learning