Pavan Chhalani

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EDUCATION

THE UNIVERSITY OF EDINBURGH

BACHELOR OF SCIENCE (HONS.) AI & COMPUTER SCIENCE

September 2020 - Present | Edinburgh, UK

- Classification: First Class (Predicted)
- Honors: Algorithms for Tarski Fixed Points & Directed Graphs

EXPERIENCE

BSR CORP. | SOFTWARE ENGINEERING INTERN

Jun 2023 - Aug 2023 | Jaipur, India

- Worked on digital transformation of fleet operations for construction company.
- Integrated a real-time vehicle and machinery tracking feature into company's internal software, reducing idle times by 15%.
- Designed a maintenance & paperwork scheduler for the fleet using React and Redux, which prompts regular servicing, decreasing unexpected downtime by 30%.

EUTIC | SOFTWARE TEAM HEAD

Dec 2022 - Mar 2023 | Edinburgh, UK

- Worked on using Modern Portfolio Theory to diversify the portfolio by finding lowcorrelation assets.
- worked on a quantitative investment strategy in the biggest student-managed portfolio in the UK, with more than 75,000 GBP worth of assets under management.

UNIVERSITY OF EDINBURGH | COMPUTATION AND LOGIC TUTOR SEP 2022 - Jan 2023 | Edinburgh, UK

- Assisted in assembling lesson plans to administer to students, which improved average grade by 25% and kept them on track with assignments.
- Gave in-person instruction to 10 Informatics students to help them acquire excellent knowledge of functional programming and computational logic.
- Kept records of academic performance and applied this information to address areas of improvement for students.

PROJECTS

SignSpeak | REACTJS, PyTHON, Tensorflow

Aug 2023 - Now

- Created Real-Time hand sign detector model with Tensorflow, aimed to help people with speech impairment use video conferencing platforms.
- Collected and labeled images of standard hand signs, reaching 98% percent accuracy.

System Design Project | TypeScript, REACT NATIVE, PYTHON Jun 2022

- Designed and programmed a mobile alarm clock with Python and ROS, reducing subjects' oversleeping by 35%.
- Programmed Sleep Tracking page for the compliant app, with React Native and firebase, increasing user engagement by 25%.

$\textbf{MarketMood} \hspace{0.1cm} | \hspace{0.1cm} \textbf{PyTHON}, \hspace{0.1cm} \textbf{SPARKNLP}, \hspace{0.1cm} \textbf{PYSPARK}$

Jun 2022

- Created Model to make stock research easier, aimed to filter out stocks based on the latest news and updates received about the company.
- Acquired, Preprocessed, and labeled (using yfinance) over 10,000 Articles. Trained a Naive Bayesian Model to predict the stock movement.

SKILLS

PROGRAMMING

Over 5000 lines: Python • Java • Javascript Over 1000 lines: Typescript • Haskell • C Familiar: Kotlin • C#

DATABASES

PostgreSQL • MySQL

VCS & BUILD TOOLS

Git • Docker • Github Actions

CLOUD SERVICES

Familiar:

AWS • GCP • Firebase

AWARDS

2023 ETH London 2023 pwnED3 2023 AdaHack 2022 Hack the Burgh 2022 pwnED2

GRANTS

\$200 SuperProf Tutoring £350 University of Edinburgh £150 ETH, London

CERTIFICATES

- EUTIC Junior Analyst
- Fundamental of Quantitative Modelling

COURSEWORK

Algorithms and Data Structures
Submodular Games Equilibria
IoT systems
Computer Systems
Data Science
Machine Learning
Mobile Robotics
Functional Programming
Object-Oriented Programming
Linear Algebra
Discrete Mathematics

ACTIVITIES

EU Trading and Investment CompSoc