ATHARV PATWARDHAN

+1 (856)-379-0074 | reach.to.atharv@gmail.com | linkedin.com/in/atharv-patwardhan | atharvpatwardhan.vercel.app | github.com/atharvpatwardhan

Work Experience

Independence Education Philadelphia, PA
Software Developer Intern Jun 2024 - Aug 2024

- Built a data analytics dashboard that links to the Canvas student software for an Ed-Tech startup, leveraging technologies such as TypeScript, React.js, Chart.js, PostgreSQL, and Node.js to provide actionable insights.
- Used data visualization techniques to present complex datasets in an intuitive manner, enhancing user engagement and enabling data-driven decision-making, which improved learning outcomes for learners and educators.
- Developed a chatbot prototype using the GPT-3.5-turbo model and langchain, integrating a Retrieval-Augmented Generation (RAG) architecture for enhanced accuracy and contextual relevance, which increased user interaction and support efficiency.
- Improved application performance by implementing optimized code practices and modern development tools, achieving a 30% increase in internal efficiency and development speed during peak feature development sprints, while ensuring seamless scalability across the platform.

VIIE Mumbai, IN
Software Engineering Intern Dec 2022 - Jul 2023

- Led the development of the VIIE Web Application using React.js, Next.js, and Tailwind CSS, which enhanced scalability, performance, and maintainability, resulting in a better user experience.
- Directed AGILE software development methodology across a 15-member cross-functional team to adapt to shifting project requirements, improving team response time to changes and enhancing resource allocation efficiency.

Feynn Labs Bangalore, IN
Machine Learning Intern May 2022 - Jul 2022

- Implemented diverse Machine Learning Models, including LSTM, Multiple Linear Regression, and Support Vector Regression, to solve complex optimization challenges, resulting in enhanced operational efficiency and approximately 15% growth in revenue.
- Conducted data exploration and generated comprehensive reports that helped stakeholders make informed decisions and advance strategic initiatives.

Education

Rutgers University
Bachelor of Science, Computer Science, Computational and Applied Mathematics May 2025

- Achievements: 3.83/4.0 GPA, Recipient of Philadelphia Philanthropic Society for Information Management Foundation Inc. (PHISIM) Award for Academic Excellence, and Chancellor's Merit Scholarship.

Projects

Autonomous Driving Model

- A Convolutional Neural Network (CNN) for autonomous driving, inspired by Nvidia's end-to-end learning research, tested using the Udacity Driving Simulator.
- Achieved a 90% success rate in lane keeping and applying data augmentation techniques such as Gaussian Blur to improve training results.
- Attained 98% accuracy on the model after training on 50 epochs using the Google Cloud Platform.

AI Job Board

- An AI-driven Job Board leveraging data from US Bureau of Labor Statistics to provide actionable career insights. Integrated a salary prediction model with over 85% accuracy using Random Forest Regression and a user-based collaborative filtering based recommendation system powered by cosine similarity, enhancing suggestions by 30%.
- Implemented an interactive dashboard with the streamlit and plotly libraries, to visualize key trends such as salary projections, high-demand skills, growing and declining industry sectors, and much more, enabling users to make data-informed career decisions.

Clash Royale Analytics Dashboard

- Built an interactive analytics dashboard using python and the panel library to efficiently process and analyze over 13 GB of player data from the popular strategy game Clash Royale.
- Leveraged algorithms like K-Means Clustering to uncover insights on metrics such as elixir usage, card usage and other gameplay trends across 20+ arenas, assisting strategic decision making for players.

Skills

Python, Java, JavaScript, TypeScript, R, C++, HTML, CSS, MySQL, Oracle SQL Server, MongoDB, SQLite, Git, Spring Boot, Flask, Streamlit, Data Structures and Algorithms, JSON, REST API, Microservices, Tensorflow, Langchain, Pytorch, Keras, Scikit-learn, Numpy, Pandas, Matplotlib, Holoviews, Hvplot, Seaborn, TF-IDF, Sentiment Analysis, Statistics, Big Data Algorithms