

MEGHNA PERURI

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Experience:

Corp Ten International, DTC Government Solutions, Software Engineering Intern | Virginia, USA

June 2023- August 2023

- Played a pivotal role in initiating and developing the UCAP 2.1 (UniTrac Cost Accounting Program), acting as the sole full-time contributor on the project. Employed HTML, CSS, and JavaScript to design responsive user interfaces, greatly enhancing data presentation and user engagement.
- Revolutionized the UCAP 2.1 application's performance, maintainability, and user experience by implementing Vue3.js for its reactive and component-based features, leading to a remarkable 75% improvement in application performance. Additionally, streamlined the PDF invoice generation process from 3 minutes to 40 seconds using pdfMe and PypDF2 in Python, PostgreSQL, in a DevOps, Test Driven Development(TDD) and Agile-driven environment.

Adecco India Pvt Ltd, Data Analyst Intern | India

August 2021 - July 2022

- Led a project to predict password strength using NLP techniques, aiding the Data Science team in enhancing cybersecurity measures.
- Employed data cleaning, preprocessing, statistical analysis, and data visualization tools(Matplotlib) to support strategic decision-making, including the use of NLP for advanced data modeling.

Cyber Security & Forensics Intern, JNTUH | India

June 2021 - September 2021

- Controlled an innovative image authentication feature, just like Discord's security mechanism, where users identify an outlier image for verification. This feature, integrated with OAuth and Passport for robust authentication, involved storing the coordinates of the random image using randomization in a PostgreSQL database, granting access upon accurate interaction, thus significantly increasing security measures.
- Enhanced user satisfaction by 25% through leading the development of an advanced two-factor authentication system. Utilized React, HTML, and CSS for front-end development, ensuring a seamless and intuitive user interface.

Primark Infotech, Software Engineer Intern | India

July 2020 - June 2021

- Developed and Led team in designing and developing software solutions using technologies like Python, JavaScript, React.js, and Node.js. Participated in code reviews and contributed to improving code quality.
- Involved in troubleshooting and debugging software issues, implementing best practices in software development, and working with tools such as Git, GitHub and Postman. Gained proficiency in database PostgreSQL, and engaged with Azure Cloud.

Projects:

Image Captioning for Autistic/Down Syndrome | Python, TensorFlow, Keras

March 2022 - May 2022

- Oversaw a team of 5. Conducted research with psychologists and 3 therapists in research and development phases to tailor the user experience and functionality for autistic learners. Validated and refined the tool through 50+ testing sessions with therapists, significantly improving educational and accessibility features for children with visual or auditory challenges.
- Ensured rapid development and scalability by using AWS Amplify for deployment, catering to developers' code search needs effectively. Developed a Python-based Image Captioning system targeted for 100+ autistic children, using TensorFlow, Keras, image processing, enhanced with LSTM for accurate text generation.

Predictive Analytics for Patient Readmission | Python, PostgreSQL, PowerBI

July 2023 - September 2023

- Steered a comprehensive analysis of time series data, preparing and forecasting with a focus on predictive accuracy in healthcare outcomes.
- ARIMA Model Expertise: Developed deep insights into ARIMA components through a series of intuitive studies, culminating in the application of Auto-ARIMA for precise data modeling. Successfully predicted patient readmission rates using time series algorithms, demonstrating the potential for significant improvements in healthcare management and patient care.

ArtiFi - Artifacts Infinite on Internet Computer | ICP, React.js, Web3.js, Motoko

November 2023 - January 2024

- Token Launch Success: Launched a custom crypto token, acclaimed in my 150 member friend group.
- NFT Marketplace on ICP: Built an NFT marketplace on ICP, using Web3.js and Motoko for decentralized trading.
- Responsive and modular frontend for the NFT marketplace, designed with React.js, received positive feedback for its user-friendly interface and seamless navigation. Marketed through clubs in the University.
- Marketplace Functionalities: Added minting, listing, buying, and discovering NFTs, leading to high engagement and market activity.

UI Code Companion | Python, Flask, Angular, HTML/CSS, JavaScript, MySQL, AWS Amplify

August 2023 - November 2023

- Designed and developed a centralized web application, streamlining code search and integration for developers. Improved platform efficiency, cutting code search and integration time by 70% with a user-friendly interface and advanced search functionality. Employed Python with Flask for the backend, Angular with HTML/CSS, JavaScript for a responsive frontend, and MySQL for database management.

Education:

George Mason University | Virginia

August 2022 - May 2024

Master of Science in Computer Science

Related Coursework - Mathematical Foundations of CS, Comp Systems and Systems Programming, Object Oriented Software Specifications, Database Systems, Analysis of Algorithms, Database Programming for WWW, Computer Graphics, Software Testing, Decision Guidance Systems.

CVR College of Engineering | India

August 2018 - June 2022

Bachelor of Technology in Information Technology

Related Coursework - Data Structures, Statistics, Cloud Computing, Big Data Analytics, Mobile App Development, Software Engineering.

Certifications/Challenges: Certification in Full Stack development, Oracle Academy's Artificial Intelligence with Machine Learning (AI ML), Certified in Entrepreneurship (T-tribe), 100 days of code(python).

Technical Skills/ Tools: Python, Java, C, SQL, HTML 5, CSS 3, JavaScript ES6, React.js, Vue3.js, jQuery, REST API, Node.js, Express.js, Web3, DApps, Motoko, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, SciPy, PyTorch, TensorFlow, Keras, PySpark, MongoDB, Hadoop, MySQL, PostgreSQL, AWS, Azure Cloud, Visual Studio, XML, HTML, Postman, JSON, Jupyter, Git, GitHub, Azure Boards, Unix, Linux, Flexbox, Grid, Bootstrap 5, EJS, Bash Command Line, NPM, OAuth, Passport, CICD pipelining, DevOps.