

VIJAY THAKKALLAPALLY

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EDUCATION

University of Florida | GPA : 3.55/4.0

Jan 2023 - Dec 2024

Master of Science in Computer Science

Gainesville, FL

Courses: NLP, DataBase Management Systems, Analysis of algorithms, Distributed Operating Systems

VNR Vignana Jyothi Institute Of Engineering and Technology | GPA : 9.02/10.0

Aug 2018 - Jun 2022

Bachelor of Technology in Computer Science Engineering

Hyderabad, India

Courses: DSA, Computer Networks, Java, OOPS, Software Engineering, cloud computing

TECHNICAL SKILLS

Languages & Databases: Java, Python, C, C++, JavaScript, C#, HTML, PHP, SQL, MySQL, NoSQL, Postgres SQL, MongoDB

Web and Cloud : Angular, ASP.NET CORE, HTML, Node JS, React JS, Redux, RESTful API, SpringBoot

Other Technologies: Postman, Pandas, numpy, Android Studio, Github, Git, Docker

WORK EXPERIENCE

Software Engineer | University of Florida

Apr 2023 - Current

- Developed and deployed a robust architecture for selecting ideal chemicals to enhance plant growth, tailored to diverse environmental and soil conditions by utilizing genomic and phenotypic data.
- Utilized Python's MPI and GPU acceleration via CUDA to accelerate parallel data processing, achieving a 40% reduction in computation time.
- Implemented advanced optimization algorithms, including Nelder-Mead, EasyPheno, and Particle Swarm Optimization, resulting in a 20% increase in precision and a 25% improvement in overall model performance.
- Analyzed and visualized chemical parameters using Python, R, Seaborn, and Tableau, enabling deeper insights and strengthening data-driven research initiatives.

Software Engineer | DarwinBox Digital Solutions Private limited, India

Jan 2022 - Dec 2022

- Served as full-stack developer, enhancing the company's HR software with Node.js and Java, achieving a 20% improvement in functionality and customer experience. Led front-end and back-end developments, collaborating within a cross-functional team.
- Designed and executed comprehensive unit testing scenarios using Java, leading to a 30% increase in code coverage. This initiative significantly enhanced the robustness and reliability of the codebase.
- Integrated and deployed APIs on AWS cloud via CI/CD pipelines, resulting in a 30% reduction in deployment time.
- Collaborated within cross-functional teams to prioritize code quality and integration in the MVC ecosystem, resulting in a 20% escalation in feature delivery rate.

Software Development Intern | DarwinBox Digital Solutions Private limited, India

Oct 2021 - Jan 2022

- Played a pivotal role in product creation as a Product Development engineer, actively engaged in every stage from concept to market launch. Designed initiatives that accelerated development timelines by 15%, through the implementation of innovative solutions.
- Engaged collaboratively in an agile framework with cross-functional teams, actively participating in 100% of daily scrum sessions.
- Gained experience in software lifecycle management, leading efforts to enhance product features and ensure alignment with market demands. These strategic enhancements led to an increase 25% in efficiency and market competitiveness.

PROJECTS

Android Malware Detection (Web Application using Machine Learning) | Python, Flask, Keras, TensorFlow

- Developed a machine learning platform capable of predicting Android app malware with 90% precision, significantly enhancing system security and user trust.
- Engineered a user-friendly web interface to streamline malware detection, enhancing functionality and user interaction.

GatorTaxi : Ride Management System | C++, bash, Hipergator

[link](#)

- Architected a cutting-edge ride-sharing program in C++ employing Red-Black Trees and Min-Heaps, achieving logarithmic time complexity ($O(\log N)$) to enhance system speed by 20% and ensure seamless customer experience.
- This resulted in a 50% improvement in ride-matching speeds and a 40% increase in overall system throughput.
- Optimized ride request management with custom RBT and Min-Heap, yielding a 43% performance boost while synchronizing data structures for efficient ride-sharing services.

Shopping Through Live Streaming (Android App) | Java, WebRtc, XML

- Engineered an innovative Android application that integrates live streaming with a rating system, enabling real-time purchasing decisions and enhancing end-user engagement by 30%. Utilized Java, MySQL and PHP.
- Resulting in a 40% growth in user interaction and a 25% rise in transaction completion rates. Demonstrating effectiveness and efficiency in Consumer engagement and sales processes.

ACHIEVEMENTS

- Published apps on the **Google Play Store** and has a substantial installation base approximating **2 million**, experiencing continuous growth. The apps are trending in more than **20 countries**, showcasing their wide appeal and positive reception.