

VIJAY THAKKALLAPALLY

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EDUCATION

University of Florida | GPA : 3.75/4.0

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 : ASP.NET CORE, Node JS, React JS, Redux, Flutter, SpringBoot, RESTful API

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

WORK EXPERIENCE

Graduate Research Assistant | **University of Florida**

Apr 2023 - Current

- Led the development of advanced crop modeling techniques under Dr. Charlie Messina's mentorship, utilizing sophisticated tools like Easy Pheno Optimizer and NelderMead Optimizer to refine predictive accuracy.
- Significantly enhanced crop yield predictions, achieving a 12% improvement in accuracy through advanced Python programming and comprehensive analysis of crop interactions with varying weather conditions and soil types.
- Pioneered the implementation of innovative crop management strategies, leading to a 20% increase in agricultural yields by optimizing botanical characteristics tailored to specific environmental conditions.

Software Development Engineer | **DarwinBox Digital Solutions Private limited, India**

May 2022 - Nov 2022

- Served as a key full-stack developer, enhancing and maintaining the company's HR software using Node.js and Java. Led both front-end and back-end developments, collaborating effectively within a cross-functional team to achieve a 20% improvement in application functionality and customer experience.
- 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.
- Drove cross-functional collaboration by actively participating in ideation sessions, performing detailed market research, and supporting the formulation and execution of product strategies using insights developed through Java and Node.js applications. Contributed substantially to the development and implementation of strategies, boosting efficiency by 15%.

Product Development Intern | **DarwinBox Digital Solutions Private limited, India**

Jan 2022 - May 2022

- Played a pivotal role in product creation as a Product Development Specialist, actively engaged in every stage from concept to market launch. Designed initiatives that accelerated development timelines by 15%, through the implementation of innovative solutions.
- Gained extensive 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% increase in user interaction and a 25% rise in transaction completion rates. Demonstrating effectiveness and efficiency in Consumer engagement and sales processes.

ACHIEVEMENTS

- Published successful apps on the **Google Play Store** with a substantial installation base approximating **2 million**, experiencing continuous growth. The apps have gained popularity, trending in over **20 countries**, showcasing their widespread appeal and positive reception.