Nadimpalli Ujwal Srimanth Varma

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EDUCATION

DAV PUBLIC SCHOOL

Central Board of Secondary Education

Sri Aakash Junior College

Telangana State Board

Amrita Vishwa Vidyapeetham

CGPA - 9.12

Hyderabad, Telangana, India Completed schooling in 2019 Hyderabad, Telangana, India Jun 2019 – Sep 2021 Coimbatore, Tamil Nadu, India

EXPERIENCE

Software Development Intern

Providence

Jun 2024 – Aug 2024

- Developed 3 new features across 6 sprints using a tech stack of **Node.js**, **Express**, **React.js**, and **PostgreSQL**.
- Applied **Agile** practices, including sprint planning and daily scrum meetings, to deliver incremental and high-quality solutions.
- Integrated large-scale APIs with efficient **pagination** logic to handle 1,000+ records per call, reducing query load and improving response time.
- Refactored backend services using modular patterns to reduce duplication by 20%, enhance maintainability, and promote testable code.

Software Development Intern

Providence

Jan 2025 – Jun 2025 (Ongoing)

- Developed modular backend components using .NET and TypeScript, applying clean, reusable logic to streamline dynamic data processing
- Wrote comprehensive unit tests using **Jest** to ensure functionality and prevent regressions across new and existing modules.
- Set up telemetry pipelines in **Azure Application Insights** to collect logs, custom events, and metrics, enabling proactive alerting and diagnostics.
- Designed KQL-powered dashboards to monitor real-time service performance and trigger rule-based anomaly alerts to notify developers of issues.

PROJECTS

Image and Scanned Document Forgery Localization *Pvthon*

<u>GitHub</u> <u>Demo</u>

- Built a CNN + ELA model for image forgery localization, achieving an F1-score of 0.57, rivaling MantraNet while significantly reducing inference time.
- Achieved **80%+ F1-score** when tampering exceeded 10%, indicating strong **robustness to manipulation intensity**.
- Implemented YOLOv8 for scanned document forgery detection, reaching **0.92 precision** and **0.48** recall—effective on structured formats like bills and invoices.
- Used **Roboflow** with 8 augmentations for dataset prep; observed potential for improvement with **higher-quality inputs**.

Smart Internship Tracker - Spring Boot Web App

Java, Spring Boot, MongoDB, REST APIs

- **Objective:** Built a lightweight Spring Boot web app to help colleges manage internship applications and feedback records.
- Developed **RESTful APIs** to handle student registrations, internship listings, and feedback submission.
- Integrated MongoDB using Spring Data for storing user details and internship data in a flexible schema.
- Implemented basic **role-based login system** (student/mentor) using Spring Security with in-memory authentication.
- Followed MVC pattern to separate controller, service, and data access layers for cleaner code structure.

Full-Stack Social Media App

GitHub

- Built a complete social media platform with login/signup, posts, likes, friend requests, and profile management.
- Implemented real-time chat using Socket.io's event-based system with seen and delivered indicators.
- Used **Redux** for managing app state and JWT for secure user authentication.
- Designed a responsive interface with **dark/light mode** using MUI and added sponsored ad display.
- Followed modular MVC structure and tested APIs with Postman for smooth frontend-backend integration.

Indian School Dropout rates

GitHub HTML,CSS,JavaScript,PHP

• Purpose: Studied school dropout patterns across India by collecting data from 10+ sources to identify major causes and propose potential solutions.

- Analyzed dropout data and found that 40-50% of students left school due to financial difficulties and lack of interest.
- Designed 7–8 relational schemas using ER diagrams, and normalized the data to maintain consistency and avoid redundancy.
- Developed a web-based application with interactive visualizations to present insights and encourage students to continue education up to Class 10 or Class 12.

CERTIFICATIONS

Certificate of Completion - Industrial Project Issued By SAP Labs

GitHub Demo

Demo

Issue Date: 26-07-2024

Project: Efficient Code Review Automation

Tech Stack: Node.js, React.js, AWS (S3, CodeGuru)

- Developed a web-based system to automate code reviews using AWS CodeGuru, removing the need for manual uploads and pull requests.
- Built back-end middleware to:
 - * Accept and upload Java/Python code files to S3 within 5 seconds supporting an automated code review pipeline.
 - * Automatically raise pull requests from the uploaded S3 files to CodeGuru for review.
 - * Return actionable insights to the frontend, reducing review time by 50%.
- Replaced a 10-minute manual process with a 4–5 minute automated pipeline, enhancing efficiency and consistency for developers.

SKILLS

Languages: Python, C++, Java, JavaScript, TypeScript, HTML, CSS

Web Frameworks: Node.js, Express.js, React.js, .NET, Redux

Databases: MvSQL, PostgreSQL, MongoDB

APIs and Integration: RESTful APIs, OAuth2, JSON, Postman, Python Requests, API Gateways

Machine Learning and Data Science: Scikit-learn, Pandas, NumPy, TensorFlow, Keras, OpenCV, Matplotlib,

Seaborn

Development Tools: Git, GitHub, VS Code, Jupyter Notebook **Testing and Monitoring:** Jest, Azure Application Insights

Soft Skills: Collaboration, Teamwork, Leadership

PUBLICATIONS

• REGION Wise iMAGE Forgery Localisation: A CNN Framework with Error Level Analysis, presented at the 3rd International Conference in Power Engineering and Intelligent Systems (PEIS 2025), National Institute of Technology Uttarakhand, India (March 08-09, 2025).