

Hyde Nithin Sumithra Owk

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Education

University of New Hampshire, USA

January 2024 – December 2025

Master of Science in Information Technology

GPA: 4.0/4.0

Relevant Coursework: Machine Learning, Database Systems, Software Development, Networking Technology, Applied Cryptography, Computer Vision, Data Mining, Python

G. Pulla Reddy Engineering College, India

July 2018 – May 2022

Bachelor of Technology in Electronics and Communication Engineering

GPA: 3.0/4.0

Skills

Languages: Python, Java, JavaScript, C, HTML/CSS, Bash

Databases: MySQL, Oracle SQL, SQLite

Libraries: NumPy, Pandas, Scikit-learn, OpenCV

Frameworks: Flask, PyTorch, Bootstrap

Tools & Technologies: Git, AWS, GCP, JIRA, Adobe, MS Office, AppDynamics, Control-M, Unix/Linux, Site Reliability Engineering (SRE) practices, Agile/Scrum, PEGA (CSA Certified)

Experience

Wiley Edge

January 2023 – December 2023

Support Associate

- Hired as an on-site Development Engineer at HSBC, supporting the Global Payments Technology Solutions team by developing, maintaining, and optimizing enterprise-scale payment processing systems used by over 1 million customers across Global Banking & Markets (GB&M), Commercial, and Retail Banking divisions
- Engineered automation solutions using Shell scripting, Control-M, and UNIX-based cron jobs to streamline production alert resolution workflows achieving a 20% reduction in Mean Time to Recovery (MTTR) and improving overall incident response efficiency
- Designed and implemented robust business process logic in PEGA, including reusable case types, integration connectors, data pages, and decision tables; supported end-to-end development life cycle using Oracle SQL for backend logic and data operations
- Monitored and resolved critical incidents in real time by leveraging tools like AppDynamics, Splunk, and Mainframe logs; contributed to DevOps adoption by automating health checks, integrating recovery scripts with CI/CD pipelines and aligning with Agile-SRE best practices

Wiley Edge

March 2022 – June 2022

Intern

- Completed intensive technical training in Software Development Life Cycle (SDLC), ITIL processes, and cloud fundamentals, while gaining hands-on experience with Linux essentials and scripting
- Developed a full-stack “Expense Tracker” web application using Python, Flask, MySQL, and Matplotlib, enabling users to track and visualize income and expenses efficiently
- Enhanced skills in Python programming (OOP, file/error handling) and advanced SQL (joins, subqueries, stored procedures, triggers), with a strong foundation in database design and normalization

Projects

Human Emotion Recognition Using Convolutional Neural Networks (CNN)

January 2025 – March 2025

Tech Stack: Python, TensorFlow/Keras, OpenCV, CNN, NumPy

- Developed a custom CNN model for recognizing seven human emotions from 48x48 grayscale facial images, utilizing extensive data preprocessing including normalization, contrast enhancement, and augmentation (rotation, flipping, brightness adjustment) to improve robustness and reduce overfitting
- Conducted comprehensive model training and evaluation using metrics such as accuracy, precision, recall, F1-score, and confusion matrix; achieved notable performance on distinct emotions while analyzing misclassification patterns in ambiguous expressions
- Gained practical insights on deep learning pipeline design, model tuning, and limitations of facial emotion recognition; recommended enhancements including deeper CNN architectures and transfer learning to increase model accuracy and adaptability in diverse real-world conditions

Expense Tracker – Full-Stack Web Application

March 2022 – June 2022

Tech Stack: Python, Flask, MySQL, HTML, CSS, JavaScript, Matplotlib

- Engineered a dynamic, full-stack personal finance tracker enabling users to securely manage income, expenses, and savings in real-time
- Built a robust backend using Flask and MySQL, supporting user authentication, CRUD operations, and session management
- Integrated Matplotlib to visualize financial data with interactive charts such as monthly trends, category-wise spending, and savings patterns
- Designed a responsive front end using HTML/CSS/JavaScript, optimized for cross-browser compatibility and seamless user experience
- Focused on scalability, clean MVC architecture, and data integrity to ensure a secure and maintainable application