VARUNTEJ KODANDAPURAM

+1 517-755-0737 | varuntejkodandapuram@gmail.com | LinkedIn | Portfolio | GitHub

EDUCATION

College of Engineering, Michigan State University, East Lansing, MI Aug 2023 – Dec 2024
Master of Science, Computer Science GPA: 3.81

College of Engineering, Michigan State University, East Lansing, MI Aug 2019 – May 2023
Honors in Bachelor of Science, Computer Science, Minor in Business GPA: 3.82

WORK EXPERIENCE

Graduate Teaching Assistant | ***C++, Linux, C, LLMs, Discrete Mathematics*** Aug 2023 – Dec 2024
Michigan State University, East Lansing, MI

- Orchestrated interactive programming labs for over 100 undergraduates in C++, ARM, and C, improving hands-on learning and boosting assignment completion rates by 30%
- Designed curriculum materials including quizzes and projects in collaboration with faculty, leading to a 10% increase in student exam scores
- Deployed real-world scenarios in Discrete Mathematics instruction, enhancing student understanding and application skills
- Mentored students in using Linux and LLMs, significantly raising proficiency levels across the course
- Facilitated weekly code review sessions, sharpening debugging skills and increasing code quality among students

Full-Stack Developer | ***Python, Power BI, AWS, NLP, Project Manager*** Sep 2022 – Dec 2022
United Airlines, East Lansing, MI

- Engineered an algorithm for United Airlines Learning Management System (LMS) that evaluates quiz efficacy by comparing students average scores, enhancing course assessment accuracy by 30%
- Leveraged data visualization tools to enable quick identification of performance trends, thus reducing data analysis time by 40%
- Built a user-friendly User Interface for United Airlines LMS, enhancing accessibility and increasing user engagement by 35%
- Developed Python-based analytics that improved training material alignment by 25%
- Optimized data processing scripts, cutting report generation time by 50% for the client

Robotic Process Automation Developer | ***UIPath, VB.net, C++, SQL, Product Manager*** Nov 2021 – Aug 2022
Delta Dental of Michigan, Okemos, MI

- Utilized C++ along with UIPath to build a virtual bot that aligns Delta Dental's agent lists with government records, achieving a 95% accuracy improvement
- Automated agent data storage into Excel, enhancing data accuracy by 40% for over 10,000 annual records
- Implemented bots on virtual machines for role-based data sorting across 500+ roles, reducing data retrieval times by 50%
- Enhanced Verification Automation Robot's (VAR) efficiency by integrating advanced error management features
- Led RPA project initiatives and coordinated with cross-functional teams, improving project delivery speed by 20%

CERTIFICATIONS

Project Management Professional Training (35 PDU Contact Hours)	**TIA Education Group**	Jan 2025
AWS Certified Solution Architect	**Amazon Web Services**	Oct 2024
Salesforce Certified AI Associate	**Salesforce (Trailhead)**	Oct 2024
AT&T Summer Learning Academy Extern	**AT&T**	Aug 2021

RESEARCH PROJECTS

Graph Convolutional Network for Node Classification | *Python, PyTorch, LLM, ML* Jan 2024 – May 2024

- Developed a Graph Convolutional Network (GCN) using PyTorch, attaining 93.7% accuracy in node classification
- Enhanced model performance through extensive hyperparameter tuning and applying dropout and weight decay

Credit Card Approval Model Prediction | *Python, MATLAB, ML, GenAI* Aug 2023 – May 2024

- Implemented and evaluated ML models, including Logistic Regression, Decision Trees, SVM, Perceptron, achieving 84.71% accuracy with SVM (linear kernel) for credit card approval prediction using the UCI dataset
- Conducted comparative analysis of classifiers using accuracy and feature importance, highlighting SVM and Logistic Regression for effective credit risk assessment

NELoRA Reproduction & Enhancement | *Python, MATLAB, Deep Neural Networks* Sep 2022 – Dec 2022

- Generated Dechirp and neural decoding models, securing a 15% improvement in accuracy over the NELoRA model
- Presented findings and code to 300 students, demonstrating the enhanced model's superior performance

TECHNICAL SKILLS

- **Programming Languages:** Python, C++, C, ARM, JavaScript, VB.NET, HTML, CSS, SQL, OpenGL, MATLAB
- **Data Visualization:** Excel, Microsoft Power BI, Python (Matplotlib, Seaborn, Plotly)
- **Development & Deployment Tools:** AWS, Microsoft Azure, Salesforce, Docker, Git
- **ML Libraries:** TensorFlow, Keras, PyTorch, scikit-learn, pandas, NumPy
- **Project Management Tools:** Agile, Waterfall, Gantt Charts, Trello, Jira, SDLC, ML feature cycle, Scrum
- **Core Expertise:** Software Development, Machine Learning, Natural Language Processing, Data Science, Predictive Modeling, Data Analytics, LLMs, Neural Networks, Front-End Development, Technical Project Management