

VARUNTEJ KODANDAPURAM

+1 517-730-4554 | varuntejkodandapuram@gmail.com | LinkedIn | Portfolio | GitHub

EDUCATION

College of Engineering, Michigan State University, East Lansing, MI <i>Master of Science, Computer Science</i>	Aug 2023 – Dec 2024 GPA: 3.81
College of Engineering, Michigan State University, East Lansing, MI <i>Honors in Bachelor of Science, Computer Science, Minor in Business</i>	Aug 2019 – May 2023 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