

VARUNTEJ KODANDAPURAM

+1 517-755-0737 | kodandapuramvaruntej@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

<i>Software Developer</i> Python, TensorFlow, PyTorch, NLP, Web Scraping, AWS PackSense, East Lansing, MI	Mar 2025 – Present
<ul style="list-style-type: none">Engineered a full-stack AI platform using Python and Flask to auto-scrape 10K+ reviews/month, cutting manual effort by 60%Implemented JS-based filtering, improving processing speed by 30% and accuracy for large text dataEnhanced keyword extraction accuracy by 25% using TF-IDF and FP-Growth, reducing manual review by 40%Collaborated with 3+ teams to extract insights from e-commerce data and improve packaging sustainability	
<i>ML Engineer</i> Python, TensorFlow, PyTorch, Statistical Modeling, Data Analysis Michigan State University, East Lansing, MI	Feb 2025 – May 2025
<ul style="list-style-type: none">Built and deployed Random Forest and transformer-based few-shot models on large-scale Google Trends + clinical datasets to detect anomalous COVID-19 incidence patterns, improving early warning accuracy by 20%Built Spark-Python pipelines to balance skewed data using oversampling and custom loss, improving model robustness by 10%Tuned TensorFlow and PyTorch models with cross-validation, raising prediction accuracy by 10%	
<i>Graduate Teaching Assistant</i> C++, Linux, python, ARM, LLMs Michigan State University, East Lansing, MI	Aug 2023 – Dec 2024
<ul style="list-style-type: none">Directed interactive C++ & Python programming labs for 100+ undergraduates and collaborated with faculty to design curriculum materials, boosting assignment completion rates by 30% and exam scores by 10%Facilitated weekly code review sessions, sharpening debugging skills and increasing code quality among students	
<i>Software Developer</i> Python, Power BI, AWS, NLP, Project Manager United Airlines, East Lansing, MI	Sep 2022 – Dec 2022
<ul style="list-style-type: none">Led ML engineering team at United Airlines to build algorithms assessing course and instructor effectiveness for technician trainingLeveraged data visualization tools to enable quick identification of performance trends, thus reducing data analysis time by 40%Created a user-friendly User Interface for United Airlines LMS, enhancing accessibility and increasing user engagement by 35%Streamlined data processing scripts, cutting report generation time by 50% for the client	
<i>Software Developer</i> UIPath, VB.net, C++, SQL, Product Manager Delta Dental of Michigan, Okemos, MI	Nov 2021 – Aug 2022
<ul style="list-style-type: none">Built & deployed virtual bots using C++, UiPath to automate certain ongoing business tasks in the companyAutomated the alignment of Delta Dental's agent lists with government records, achieving a 95% accuracy improvementLed 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

PROJECTS

LLM-Based Student Q&A Assistant with RAG <i>React, Python, GCP Vertex AI</i>	Jun 2025 – Present
<ul style="list-style-type: none">Built a React front end and integrated Vertex AI Search for RAG-based Q&A on course materialsCoordinated with MSU IT for deployment, user access, and cost-efficient hosting within university systems	
Credit Card Approval Model Prediction <i>Python, MATLAB, ML, GenAI</i>	Aug 2023 – May 2024
<ul style="list-style-type: none">Designed and benchmarked ML models (Logistic Regression, Decision Trees, SVM, Perceptron), achieving 84.71% accuracy with SVM for credit card approval prediction using UCI dataset	

TECHNICAL SKILLS

- Programming Languages:** Python, SQL, C++, JavaScript, Flask, React
- 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