

# Vishvendra Reddy Bhoomidi

Aspiring Software Engineer Intern | AI/ML Engineer | Deep Learning | Cloud Computing | Python | C

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## SUMMARY

Master's student in Artificial Intelligence at the University of Michigan with expertise in software engineering, deep learning, and cloud-native architecture. Experienced in building scalable AI-driven applications that reduce latency and increase throughput. Experienced in Python, JavaScript, and modern frameworks, with a strong foundation in machine learning, model optimization, and deploying end-to-end intelligent systems for practical applications.

## TECHNICAL SKILLS

**Programming:** C++, C, Python, Java, JavaScript(ES6+), TypeScript  
**AI/ML Frameworks:** TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, Vertex AI, SageMaker, OpenAI Gym, Lambda  
**System & Optimization Tools:** MLIR, XLA, LLVM (learning), Triton (basic), TensorRT, CUDA  
**Cloud Platforms:** AWS, Google Cloud, Azure, IBM Cloud  
**Databases:** MySQL, MongoDB, DynamoDB, BigQuery, NoSQL  
**DevOps:** Docker, Kubernetes, Jenkins, Git, Terraform, Kubeflow, PyTest, Postman  
**UI/UX + OS:** Figma, Adobe XD, Linux, Unix, Windows, MacOS, Android, iOS

## EDUCATION

**University of Michigan** May 2026 (Expected)  
Master of Science in Artificial Intelligence  
**Concentration:** Machine Learning  
**Honors:** Graduate Tuition Scholarship Recipient  
**Coursework:** Advanced AI, Intelligent Systems, Deep Learning, Software Engineering, Information Visualization & Virtualization  
**The Pennsylvania State University** May 2024  
Bachelor of Science in Computer Science  
**Honors:** Dean's List for 3 semesters  
**Coursework:** Data Structures and Algorithms, Database Management, Operating Systems, Theory of Computation, OOP

## PROJECTS

**Triton Compiler Kernel Experiment:** (Python, Triton, CUDA)  
• Engineered custom GPU matrix multiplication kernels using OpenAI Triton, achieving up to 35% speedup over native PyTorch by optimizing shared memory access across three GPU architectures to reduce cache thrashing and latency.

**AI-Enhanced Chatbot with RAG:** (Python, GPT, Flask, MongoDB, AWS Lambda, Haystack)  
• Developed an RAG-based GPT chatbot integrated with voice and vector search, decreasing support ticket volume by 50% and achieving 85% answer accuracy.

**Resume Parser and Interview Generator:** (Python, NLTK, Pyresparser, MySQL, AWS)  
• Built a Lambda-based NLP system that automated resume screening, reducing manual workload by 60% and improving candidate matching by 40%.

**AI Financial Tracker:** (Python, React, FastAPI, Plaid, OpenAI)  
• Designed a real-time expense tracker using NLP-based categorization to help users lower unnecessary spending by 25% across 150+ accounts.

**Fraud Detection System:** (Python, GAN, Flask, Firebase, Random Forest)  
• Architected a real-time fraud detection pipeline using GANs and ensemble learning, achieving 92% precision under high-volume data conditions.

## WORK EXPERIENCE

**University of Michigan** January 2025 – Present  
*Teaching Assistant – CIS 488/588: Computer Game Design and Implementation & MKT 382: Understanding Customers*  
• Guided over 100 students on AI-related coding assignments and system performance tuning across two 500-level courses.  
• Streamlined grading workflows with automation tools, cutting review times by 20% and improving accuracy.  
• Leveraged analytics to boost student participation by 25% on Canvas and Packback.  
• Coordinated end-to-end delivery of course content and labs, ensuring 100% on-time rollout.

**V&U Intellect Consultants Pvt. Ltd.** May 2023 – December 2024  
*Technical Consultant*  
• Orchestrated deployment of microservice-based AI platforms on AWS, reducing latency by 30% and improving reliability across 5 services.  
• Conducted system profiling of TensorFlow modules to resolve memory bottlenecks and boost inference throughput by 40%.  
• Implemented OKR-based productivity metrics across 3 teams, leading to a 35% rise in output quality.

## **Surge Business Development**

September 2021 – February 2022

*Business and Technology Intern, Team Manager*

- Led an 8-member cross-functional team to develop a TensorFlow-powered recommendation engine, improving user retention by 50%.
- Delivered client-centric solutions with agile sprints, reducing turnaround by 30% and maintaining a 95% delivery success rate.

## **CERTIFICATIONS**

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- AWS Certified AI Practitioner – Amazon (Expected April 2025)
- ML and AI Engineer – Google Cloud
- Azure AI Engineer Associate – Microsoft
- Generative AI and Data Science – NVIDIA
- CS50 AI with Python – Harvard
- Full-Stack Developer: HTML, CSS, JS, Django, SQL, Python, React – Code with Mosh

## **LEADERSHIP & ACHIEVEMENTS**

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- Captained college soccer team to 7 championship victories across Michigan and Pennsylvania divisions.
- Selected for Global Engagement and Leadership Experience (GELE) at Penn State, mentoring 12+ peers.
- Led National Cadet Corps (NCC) platoon as Captain for 4 years, training 60+ cadets.