

Aadarsha Gopala Reddy

a.gopalareddy@wustl.edu | +1 (740) 802-1776

agopalareddy.github.io



SUMMARY

Data-focused MS CS student specializing in ML, analytics, and data science. Strong Python, SQL, TensorFlow/Keras, visualization. Seeking data science, ML engineering, or analytics roles.

SKILLS

Programming Languages: Java, C++, Python, R, JavaScript/TypeScript, PHP, C#, SQL, Rust.

Frameworks & Libraries: TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas, Node.js, Vue.js, React, Socket.IO, Gemini/OpenAI API.

Tools & Technologies: Git, Tableau, Power BI, MySQL, AWS, MongoDB, Microsoft 365, Google Workspace.

Core Competencies: Analytical Skills, Problem Solving, Critical Thinking, Communication, Team Collaboration, Leadership, Adaptability, Project Management.

Languages: Proficient in English, Kannada, Telugu; Fundamental in Hindi.

EDUCATION

M.S. in Computer Science

Expected Graduation: May 2026

Washington University in St. Louis, St. Louis, Missouri, USA

- **GPA:** 3.52/4.0
- *Coursework:* Advances in Computer Vision, Data Manipulation & Management at Scale, Artificial Intelligence for Health, Neurobiology of Learning & Memory, Advanced Neuroscience Research Methods, Computational Biology, Deep Learning, Systems Security, Software Development, and Introduction to Quantum Computing.

B.A. in Computer Science and Data Analytics; Economics Minor

May 2023

Ohio Wesleyan University, Delaware, Ohio, USA

- **GPA:** 3.42/4.0
- *Honors:* Golden Bishop Award, Mortar Board, Florence Leas Prize, Spring 2022 and Spring 2023 Dean's List.
- *Coursework:* Computer Architecture, Theory of Computation, Algorithms, Big Data, Data Visualization, Data Analytics, Databases, Machine Learning, Artificial Intelligence, Applied Statistics.

EXPERIENCE

AI Engineer Intern

June 2025 - August 2025

Critterio, Inc., Remote

- Engineered a full-stack social media simulation and recommendation system, developing a robust data generation pipeline with persona-based modeling in TypeScript and a foundational recommendation algorithm using TensorFlow/Keras.
- Built an extensive testing infrastructure in Python with a configurable CLI for performance validation and reproducibility, establishing critical debugging practices for complex ML systems.
- Worked across the end-to-end ML lifecycle—from synthetic data generation and preprocessing to model training and debugging—while establishing Git workflows for collaborative development.

Graduate Assistant with the Taylor Family Center for Student Success

August 2024 - May 2025

Washington University in St. Louis, St. Louis, Missouri, USA

- Led strategic initiatives for First-Generation, Limited-Income (FLI) student success, planning and executing key community-building programs like "End of Week Unwind."
- Drove marketing efforts by managing social media and newsletters, and pioneered data assessment to translate user interaction insights into strategies that measurably improved engagement.
- Served as a department representative for the Executive Director and provided integral operational support to the leadership team.

Data Analyst Intern

June 2023 - May 2024

Lab714, Boca Raton, Florida, USA

- Achieved a 20% reduction in costs for clients through data-driven insights.
- Engineered a software using React and AWS to extract, organize, and analyze data from IoT devices.

RESEARCH EXPERIENCE

Domain-Adversarial Learning for Vehicle-Agnostic Driving Signature

Spring 2026 (in progress)

DRIVES Project, Washington University in St. Louis, St. Louis, Missouri, USA

- Implementing a Domain Adversarial Neural Network (DANN) to improve cross-domain generalization of driving behavior-based ML models for Alzheimer's Disease detection.

Multimodal Prediction of Alzheimer's Disease

Fall 2024

Washington University in St. Louis, St. Louis, Missouri, USA

- Developed a multimodal approach for early detection using OASIS-1 by combining MRI imaging (CNNs, TensorFlow/Keras) and clinical data (XGBoost, Scikit-learn).
- Built a combined classifier leveraging both imaging and clinical features with comprehensive evaluation and documentation in NeurIPS format.

Opinion Survey on AI in the Workplace

Spring 2023

Ohio Wesleyan University, Delaware, Ohio, USA

- Designed, fielded, and analyzed a survey experiment ($N \sim 1,000$ across four industries) under faculty mentorship; surfaced trends in perceptions of AI's workplace impact using R and Tableau.

AI in Modern Board Games (Lost Cities)

Summer 2022

Ohio Wesleyan University, Delaware, Ohio, USA

- Built a Java implementation of Lost Cities and an AI agent; achieved 13/18 wins against a human baseline in testing.

LEADERSHIP

Graduate and Professional Student Council (GPSC) | Washington University in St. Louis

Vice President, Graduate-Professional Council (GPC) Chamber

Summer 2025 - Present

- Actively support the GPC Co-President in fulfilling leadership responsibilities and advancing council goals for the Master's and Professional student body. As per the constitution, prepared to assume the duties and powers of the Co-President in their absence to ensure leadership continuity.
- Represent and advocate for GPC constituents' interests to university administration and faculty.

Constitution Committee Chair

- Leading the committee to draft and finalize the constitution, ensuring alignment with GPSC's mission and values.

Representative, McKelvey School of Engineering; Member,

Fall 2024 - Spring 2025

Membership/Constitution/Outreach Committee

- Co-authored GPSC constitution and led outreach that expanded membership and participation.
- Advocated for McKelvey students' interests to administrators and faculty.

Umang (Indian Graduate Student Association) | Washington University in St. Louis

Treasurer

Summer 2025 - Present

- Managing club finances, including budgeting, expense tracking, and fundraising to ensure sustainable operations and successful event planning.
- Collaborating with members to organize cultural events and festivals, promoting cultural awareness and fostering community among Indian graduate students.

HackWashU | Washington University in St. Louis

Treasurer

Fall 2024 - Summer 2025

- Managing the club's finances, including budgeting and expense tracking, to ensure sustainable operations and successful event planning.
- Coordinating fundraising efforts and sponsorship outreach to support club activities and initiatives.

PROJECTS

Datacenter Cooling Optimization using Deep Reinforcement Learning

August 2024 - December 2024

- Implemented multiple DRL algorithms (DDQN, PPO, SAC) integrated with EnergyPlus simulations for datacenter cooling optimization, achieving up to 35.8% improvement over baseline controllers.
- Developed custom environment using Sinergym that simulates a small datacenter with stochastic weather conditions, focusing on optimizing energy efficiency in small to mid-sized facilities.

Interactive Storybook – Web Development Project

August 2024 - December 2024

- Built an interactive app with Vue.js, Node.js, and MongoDB, enabling AI-driven content generation and branching story narratives.
- Integrated OpenAI API for dynamic text/image generation, offering multiple story progression choices.

AI Agent for Connect 4

May 2022 - December 2022

- Implemented alpha-beta pruning with iterative deepening and evaluation heuristics; achieved 100% wins against baseline AI in simulations.