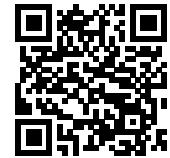# Aadarsha Gopala Reddy

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

agopalareddy.github.io

SUMMARY

MS Computer Science student at Washington University in St. Louis with research experience in deep learning for healthcare applications, including Alzheimer's Disease prediction using multimodal data and domain adaptation techniques. Demonstrated expertise in Python, TensorFlow/Keras, and end-to-end ML pipelines. Seeking ML engineering, data science, or applied AI research roles.

SKILLS

Programming Languages: Java, C++, Python, R, HTML, CSS, 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; Conversational in Hindi.

EDUCATION

M.S. in Computer Science August 2024 - *May 2026

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

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

B.A. in Computer Science and Data Analytics; Economics Minor August 2020 - 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

Graduate Assistant with the Taylor Family Center for Student Success November 2025 - *Present

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

- Leading data analysis and storytelling initiatives, tracking program attendance and impact through SA Tools, survey design and analysis, and social media analytics to drive evidence-based decision-making.
- Administering the TFCSS website, including event updates, submission forms, scheduling integration, content creation for spotlight stories, and conducting regular website audits.
- Developing comprehensive process manuals and training materials to establish best practices in data evaluation and storytelling for TFCSS staff.

AI Engineer Intern June 2025 - August 2025

Crittero, 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" and "First Gen Week".
- Drove marketing efforts by managing social media and newsletters, and pioneered data assessment to translate user interaction insights into strategies that measurably improved engagement.

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   August 2025 - *May 2026

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 Preclinical Alzheimer's Disease prediction.

Multimodal Prediction of Alzheimer's Disease   August 2024 - December 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   January 2023 - May 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)   May 2022 - July 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 of the Graduate-Professional Council (GPC) Chamber   May 2025 - *Present

- Managing the Council's unified Microsoft Teams workspace and website, establishing centralized communication hubs and maintaining up-to-date information on events, governance, and resources.
- Representing the graduate student body to university leadership and supporting the GPC President in advancing strategic council priorities.

Constitution Committee Chair   August 2025 - *Present

- Chairing the Constitution Committee to draft and ratify GPSC governing documents by the end of Fall 2025.

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

Treasurer   June 2025 - October 2025

- Managed club finances, including budgeting, expense tracking, and fundraising to ensure sustainable operations and successful event planning.
- Collaborated 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   December 2024 - July 2025

- Managed the club's finances, including budgeting and expense tracking, to ensure sustainable operations and successful event planning.
- Coordinated 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   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   August 2022 - December 2022

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