

# Aadarsha Gopala Reddy

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agopalareddy.github.io



## SUMMARY

Results-driven Computer Science Master's student with hands-on experience in machine learning and full-stack development, passionate about applying my technical skills to find solutions to difficult challenges through dedication and teamwork.

## 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, MySQL, 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

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

Expected Graduation: May 2026

**M.S. in Computer Science**

GPA: 3.52/4.0

*Coursework:* 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.

**Ohio Wesleyan University** | Delaware, Ohio, USA

May 2023

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

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

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

August 2024 - May 2025

**Graduate Assistant with the Taylor Family Center for Student Success**

- Led initiatives for first-generation/low-income student success through data-driven program planning.
- Coordinated key events, tracked student data, and contributed to assessment efforts for the department.
- Supported alumni engagement through newsletter development, database management, and other event logistics.

**Lab714** | Boca Raton, Florida, USA

June 2023 - May 2024

**Data Analyst Intern**

- Conducted data analysis to identify operational inefficiencies, leading to a 20% reduction in operating costs for clients.
- Engineered a data pipeline using React and AWS to extract, organize, and analyze data from IoT devices.

## 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.

**Multimodal Prediction of Alzheimer's Disease**

August 2024 - December 2024

- Created a multimodal method for early Alzheimer's detection using OASIS-1, merging imaging and clinical data with deep learning and ML.
- Integrated deep learning for imaging and ML for clinical data, boosting accuracy via a combined classifier.

**AI Agents for Connect 4 and Lost Cities Games**

May 2022 - December 2022

- Implemented alpha-beta pruning with iterative deepening in Connect 4, and a custom evaluation function in Lost Cities.
- Conducted simulations, achieving 100% Connect 4 wins and 73% Lost Cities wins against baseline AI.