

Aadarsha Gopala Reddy

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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, 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:* 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

Graduate Assistant with the Taylor Family Center for Student Success

August 2024 - May 2025

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

- 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.

Data Analyst Intern

June 2023 - May 2024

Lab714, Boca Raton, Florida, USA

- 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.