

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: C++, Java, 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: Linux, 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

MS in Computer Science

GPA: 3.2/4.0

Coursework: Artificial Intelligence for Health, Computational Biology, Deep Learning, and Software Development.

Ohio Wesleyan University | Delaware, Ohio, USA

May 2023

BA 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 - Present

Graduate Assistant with the Taylor Family Center for Student Success

- Leading initiatives for first-generation/low-income student success through data-driven program planning.
- Coordinating key events, tracking student data, and contributing to assessment efforts for the department.
- Supporting 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 in Python for datacenter cooling optimization, achieving up to 35.8% energy efficiency improvement, enhancing system performance and stability compared to 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.