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 seeking to leverage analytical skills and contribute to data-driven business solutions.

SKILLS

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

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

Tools & Technologies: Tableau, Power BI, Git, MySQL, AWS, MongoDB.

Core Competencies: Causal Inference, Advanced Analytics, Problem Solving, Data-Driven Decision Making, 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
- Analyzing student performance data to identify trends and generate reports for departmental assessment and program improvement - resulting in 12% increase in student engagement.
- Supporting alumni engagement through newsletter development, database management, and other event logistics.

Lab714 | Boca Raton, Florida, USA   June 2023 - May 2024
Data Analyst Intern
- Developed data-driven insights that led to a 20% reduction in clients' operating costs.
- Engineered a software solution 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 - Decemeber 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, and wrote and debugged data pipelines for preprocessing.
- 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.