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EDUCATION

M.S. Computer Science | Washington University in St. Louis, St. Louis, Missouri, USA August 2024 - *May 2026

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

B.A. Computer Science & Data Analytics | Ohio Wesleyan University, Delaware, Ohio, USA August 2020 - May 2023

- **Minor:** Economics
- **GPA:** 3.42/4.0
- **Coursework:** Computer Architecture, Theory of Computation, Algorithms, Big Data, Data Visualization, Data Analytics, Databases, Machine Learning, Artificial Intelligence, Applied Statistics.

RESEARCH EXPERIENCE

Domain-Adversarial Learning for a Vehicle-Agnostic Driving Signature to Detect Preclinical Alzheimer's Disease | DRIVES Project, Washington University in St. Louis, St. Louis, Missouri, USA

Master's Thesis (Lab PI: Dr. Ganesh Babulal) August 2025 - *May 2026

- Implementing a Domain Adversarial Neural Network (DANN) to improve cross-domain generalization of driving behavior based machine learning models for Preclinical Alzheimer's Disease prediction.
- Developing a data pipeline harmonizing sampling rates and engineering cognitively meaningful driving features (ADAS utilization, lane stability, braking patterns) to focus on spatial navigation and decision-making rather than vehicle mechanics.
- Designing a DANN architecture with gradient reversal layer to extract vehicle-agnostic cognitive signatures, forcing the model to predict Clinical Dementia Rating (CDR) scores while minimizing vehicle-identifiable information.

Multimodal Prediction of Alzheimer's Disease | Washington University in St. Louis, St. Louis, Missouri, USA

CSE 419A - Introduction to AI for Health August 2024 - December 2024

- Developed a multimodal approach for early detection of Alzheimer's Disease using the OASIS-1 dataset.
- Implemented deep learning models (CNNs) using TensorFlow/Keras for MRI image analysis and machine learning techniques (XGBoost, Random Forest Regression) for clinical data processing.
- Created a combined classifier leveraging both imaging and clinical data.
- Documented the project in NeurIPS format with comprehensive performance evaluation metrics and visualizations.

Opinion Survey on Artificial Intelligence in the Workplace | Ohio Wesleyan University, Delaware, Ohio, USA

DATA 490 - Independent Study (Mentor: Dr. Nicholas Dietrich) January 2023 - May 2023

- Designed, fielded, and investigated a survey experiment on the impact of AI on 250 employees within each of four industries using survey data.
- Analyzed data using Tableau dashboards and R to identify trends and common opinions.
- Presented preliminary results on AI's positive impact on employee work at the OWU Spring Student Symposium.

Connect 4 AI | Ohio Wesleyan University, Delaware, Ohio, USA

CS 340 - Artificial Intelligence August 2022 - December 2022

- Developed a Connect 4 game in Java with a single-player mode against an AI opponent and a multiplayer mode for two human players.
- Used the alpha-beta pruning algorithm to create a challenging AI opponent that can test players of all skill levels.

Artificial Intelligence in Modern Board Games - Lost Cities AI | Ohio Wesleyan University, Delaware, Ohio, USA

Summer Science Research Program (Mentor: Dr. Sean McCulloch) May 2022 - July 2022

- Developed a digital version of the Lost Cities card game using Java.
- Implemented an intelligent agent that played the game against a human, winning 13 of 18 games in testing.

TEACHING EXPERIENCE

Computer Science Lab Assistant | Ohio Wesleyan University, Delaware, Ohio, USA January 2022 - May 2023

- Tutored approximately ten students for over 6 hours per week, assisting with homework and exam preparation for introductory, intermediate, and advanced computer science coursework.
- Tested and graded assignments of around 35 students in introductory and intermediate computer science classes.

INDUSTRY 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 in partnership with SA Marcomm.
- Developing comprehensive process manuals and training materials to establish best practices in data evaluation and storytelling for TFCSS staff.

AI Engineer Intern | Crittero, Inc., Remote June 2025 - August 2025

- 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.
- Created an extensive testing infrastructure in Python, featuring a configurable CLI for performance validation and reproducibility, which established critical debugging practices for complex ML systems.
- Gained hands-on experience in 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 and communication efforts by managing social media channels and co-developing targeted newsletters for alumni and the Forward Families program.
- Pioneered data assessment efforts by tracking and analyzing user interaction on Instagram and newsletters, translating insights into actionable engagement strategies.

Data Analyst Intern | Lab714, Boca Raton, Florida, USA June 2023 - May 2024

- 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.

Media Center Assistant | Ohio Wesleyan University, Delaware, Ohio, USA September 2021 - May 2023

- Set up and tore down audio-visual equipment, logged equipment movement using Sierra, and created appointments for use of spaces.
- Assisted with providing AV systems and support for events, ensuring successful setup and execution.

SKILLS

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

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

Tools & Technologies: LaTeX, Git, Tableau, Power BI, MySQL, AWS, MongoDB, Snowflake, Apache Airflow, Spark, Kafka, Flink, 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.

HONORS

Affiliated School Scholarship, Washington University in St. Louis May 2024

Dean's List, Ohio Wesleyan University May 2023

Mortar Board National College Senior Honor Society Membership, Ohio Wesleyan University April 2023
Golden Bishop Award - WCSA Best New Member, Ohio Wesleyan University April 2023
Dean's List, Ohio Wesleyan University May 2022
Florence Leas Sophomore Prize, Ohio Wesleyan University April 2022
First Place - 32nd Annual Spring Programming Contest, Denison University March 2022
International Baccalaureate Scholarship, Ohio Wesleyan University January 2020
Scholar, Next Genius Scholarship Foundation January 2020

PRESENTATIONS

An Introduction to Artificial Intelligence for High School Students September 2024
Engineering Workshop by AGES & Science Coach, Washington University in St. Louis

Artificial Intelligence Opinion Survey April 2023
Spring Student Symposium, Ohio Wesleyan University

Artificial Intelligence in Modern Board Games September 2022
Patricia Belt Conrades Summer Science Research Symposium, Ohio Wesleyan University

LEADERSHIP EXPERIENCE

Bauer Leaders Academy (BLA) Student Leadership Advisory Board |
Washington University in St. Louis, St. Louis, Missouri, USA
Member November 2025 - *Present

- Providing direct feedback and guidance to BLA leadership on new and existing programs.
- Amplifying student voices to assist in the development of new student leadership initiatives and ensure student perspectives are considered in decision-making processes.
- Fostering communication between the student body and BLA leadership to enhance the student experience and promote leadership development.
- Offering insights on student concerns and encouraging student engagement with leadership opportunities on campus.

Graduate Student Affairs Advisory Board (GSAAB) | Washington University in St. Louis, St. Louis, Missouri, USA
Member August 2025 - *Present

- Providing strategic feedback to the Vice Chancellor for Student Affairs on critical issues impacting graduate student life and experience.
- Engaging in critical dialogue with senior university leaders, including the Dean of Students, to advocate for improvements to the graduate student experience across all academic programs.
- Contributing to monthly discussions on student affairs policies and initiatives to enhance support systems and resources for the graduate student community.

Center for Career Engagement (CCE) Student Advisory Board |
Washington University in St. Louis, St. Louis, Missouri, USA
Graduate Student Member August 2025 - *Present

- Guiding the strategic direction of the Center for Career Engagement to ensure services align with diverse needs of graduate students from all academic backgrounds and career interests.
- Providing insights on career engagement programs, workshops, and resources to enhance accessibility and effectiveness for the WashU graduate student community.
- Building community around career development initiatives and fostering collaboration between the CCE and graduate student body.

Graduate and Professional Student Council (GPSC) | Washington University in St. Louis, St. Louis, Missouri, USA
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.
- Building and maintaining committee membership rosters using ranked-choice preference allocation to balance workload and ensure efficient cross-committee coordination.
- Overseeing information architecture for the Council's documentation repository.
- 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.
- Coordinating stakeholder input and aligning bylaws with GPSC's mission and university policies to ensure a sustainable governance framework.

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

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, St. Louis, Missouri, USA

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.
- Collaborated with club members to organize hackathons and coding events, fostering a culture of innovation and teamwork among participants.

Hindu Student Council | Ohio Wesleyan University, Delaware, Ohio, USA

Treasurer and Founding Member January 2023 - May 2023

- Co-established the council and organized events promoting Hindu cultural heritage, fostering youth leadership skills, and creating volunteer opportunities.
- Managed organizational finances, developing and submitting formal budget requests to secure funding for council activities and events.

Wesleyan Council on Student Affairs (WCSA) | Ohio Wesleyan University, Delaware, Ohio, USA

Budget Committee Senator August 2022 - May 2023

- Actively contributed to the Budget Committee's process of proposing, discussing, and deciding on senate bills, while overseeing the allocation of an annual budget exceeding $350,000 to campus individuals and organizations.
- Recipient of the Golden Bishop Award for WCSA Best New Member, recognized for making the greatest overall contribution to WCSA's mission through drive, high achievement on the Budget Committee, and providing unique, valuable perspectives.

The Neurds (Neuroscience Club) | Ohio Wesleyan University, Delaware, Ohio, USA

Member August 2022 - May 2023

- Presented on AI at Brain Fair 2023 during Brain Awareness Week, bridging neuroscience and technology.
- Contributed to the planning and marketing of club events, directly supporting educational enrichment and networking opportunities for members.
- Participated in initiatives promoting neuroscience awareness and community service, aiming to enhance members' intellectual and career development pathways.

Campus Programming Board | Ohio Wesleyan University, Delaware, Ohio, USA

Vice President of Finance January 2022 - December 2022

- Successfully planned, created, and implemented budgets totaling over $86,000 for campus events.
- Initiated and led revamp of organization's governing documents, implementing efficient practices.
- Negotiated an additional $10,000 per year with the Wesleyan Council on Student Affairs.

Mathematics, Computer Science & Data Analytics Student Board | Ohio Wesleyan University, Delaware, Ohio, USA

Member August 2021 - May 2023

- Analyzed faculty evaluations to provide actionable insights for departmental improvements.
- Gathered and synthesized student feedback on course offerings to recommend enhancements to the department.

PROJECTS

Datacenter Cooling Optimization using Deep Reinforcement Learning | August 2024 - December 2024
Washington University in St. Louis, St. Louis, Missouri, USA

- Implemented multiple deep reinforcement learning algorithms (DDQN, PPO, SAC) integrated with EnergyPlus simulations to optimize datacenter cooling systems.
- Achieved 35.8% energy efficiency improvement over baseline using DDQN, addressing the underserved small to mid-sized datacenter market.
- Created a comprehensive framework integrating building energy simulation with reinforcement learning for dynamic thermal management.

Interactive Storybook | Washington University in St. Louis, St. Louis, Missouri, USA August 2024 - December 2024

- Developed an interactive storytelling application using Vue.js, Node.js, and MongoDB with AI-powered content generation, enabling users to create branching narrative stories.
- Implemented OpenAI API integration for dynamic story text and contextual image generation based on user choices.
- Created a visual path tracking interface to help users navigate complex branching narratives and story progression.

Socket.IO Multi-Room Chat Application | August 2024 - December 2024
Washington University in St. Louis, St. Louis, Missouri, USA

- Developed a feature-rich multi-room chat application using Node.js and Socket.IO with password-protected rooms, private messaging, and user moderation capabilities.
- Implemented room management features including creator privileges, user tracking, and persistent nickname storage.
- Created real-time bidirectional event-based communication with responsive design for optimal user experience.

PHP Calendar Application | Washington University in St. Louis, St. Louis, Missouri, USA August 2024 - December 2024

- Developed a feature-rich personal calendar and event management web application using PHP, MySQL, HTML5, CSS3, and JavaScript.
- Implemented secure user authentication, CSRF protection, SQL injection prevention, and input sanitization.
- Created an interactive calendar interface with comprehensive event management capabilities for creation, editing, and tracking.

Parkinson's Disease AI Diagnosis Software | June 2022 - July 2022
MITxSureStart FutureMakers Create-a-Thon Program, Remote

- Developed AIParkinScan software for Parkinson's diagnosis using neural networks, spectrograms, and the Random Forest algorithm trained on audio and image data.