# OLUWALADEMI LADEMI AROMOLARAN

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### **OBJECTIVE**

Driven Computer Science candidate with proven success in software engineering, applied AI/ML, and full-stack development through impactful internships and research. Experienced in building scalable applications, training machine learning models, and deploying cloud-integrated solutions that improve performance and reliability. Recognized for strong problem-solving, collaboration, and leadership across academic, professional, and community settings. Committed to leveraging technical expertise and innovation to contribute to high-impact engineering teams at leading tech organizations.

### **EDUCATION**

### **Bachelor of Science: Computer Science**

Expected in 05/2027

Waco, TX

**Baylor University** 

- Honors & Awards: Dean's Academic Honor's List (Fall 2023), Baylor Distinction Award, Baylor Association of Computing Machinery Endowed Academic Scholarship
- Relevant Coursework: Data Structures, Discrete Structures, Intro to Computer Systems, Calculus I-III, Linear Algebra
- Activities: National Society of Black Engineers (NSBE), ACM Association for Computing Machinery, Alpha Lambda Delta Honor Society, ColorStack, CodePath

### **CORE COMPETENCIES**

- Data Science & ML Tools
- Dev Tools & Frameworks
- Cloud & AI Infrastructure
- Algorithms & Data Structures
- Performance Optimization & Scalability

- Team Collaboration
- Machine Learning & Modeling
- Web & Full-Stack Development
- Problem Solving & Analytical Thinking
- Programming Languages & Foundations

### **EXPERIENCE**

#### **Software Development Intern** PAYCOM

05/2025 - 08/2025

Irving, TX

- Collaborated with cross-functional engineering teams to integrate the ML pipeline into existing systems, ensuring seamless functionality, reliability, and maintainability across backend services and user-facing applications.
- Optimized ML training processes by refining sampling strategies and integrating robust evaluation metrics, improving model scalability and retrieval performance for realworld deployment within Paycom's production environment.
- Engineered data preprocessing workflows with Scikit-learn and Pandas, including categorical encoding, numerical normalization, and triplet generation, which enhanced the efficiency and accuracy of contrastive learning models.
- Designed and implemented an end-to-end machine learning pipeline for a full-stack application, leveraging Pandas for data ingestion/cleaning, PyTorch for training dualencoder similarity models, and FAISS to enable rapid embedding retrieval during inference.

## Software Engineer - AI Consultant

05/2024 - 05/2025

OUTLIER

- . Conducted detailed evaluation and quality assurance of AI-generated content, including rating, rewriting, and refinement tasks, to systematically improve reliability and reduce model bias.
- Partnered with industry professionals and research collaborators to explore cutting-edge AI applications, driving advancements in model innovation and best practices for responsible deployment.
- Designed and optimized core algorithms for performance and scalability, implementing efficient data handling and model execution strategies that ensured robustness under production-level workloads.
- Trained and fine-tuned advanced AI/LLM models to improve response accuracy, clarity, and contextual alignment, directly contributing to the development of more reliable and human-like conversational systems.

### Software Engineering Fellow HEADSTARTER AI

- Applied strong web development skills in ReactJS, NextJS, and Firebase, constructing modular, reusable components that enhanced development efficiency and improved long-term system maintainability.
- Built and deployed production-ready applications by integrating OpenAI models, NextJS frameworks, and AWS cloud services, ensuring high performance, scalability, and seamless end-to-end functionality.
- Collaborated with cross-functional teams of engineers and product mentors, practicing agile development workflows and strengthening communication, problem-solving, and team-based project execution skills.
- Led the design and development of 5+ AI-powered applications and APIs, delivering innovative technical solutions that addressed real-world challenges and showcased expertise in both backend and frontend engineering.

### RESEARCH AND PROGRAMS

### Undergraduate Research Assistant — Artificial Intelligence Lab **Baylor University**

08/2025 - Current

- Conducting data analysis and experimentation to refine algorithms, improve accuracy, and validate approaches aligned with responsible AI practices.
- Implementing and testing models using Python, PyTorch, and Scikit-learn, supporting workflows in model training, data preprocessing, and performance evaluation.
- · Assisting with cutting-edge AI research under faculty and graduate supervision, contributing to projects exploring applications of machine learning in real-world problems

### AI4ALL Ignite Program Accelerator — Accepted Participant

Fall 2025 (Upcoming)

- Engaging in collaborative team projects to design scalable AI-driven solutions addressing societal and industry challenges.
- Selected through a highly competitive national process to join a premier accelerator focused on applied AI innovation and ethical machine learning.
- Will participate in intensive technical workshops and mentorship sessions led by leading AI professionals, emphasizing problem-solving and responsible development.

### **LEADERSHIP & AFFILIATIONS**

- ColorStack Member
- CodePath Community Member
- Alpha Lambda Delta Honor Society Inducted Member
- ACM Association for Computing Machinery Active Member
- National Society of Black Engineers (NSBE) Chapter Planning Co-Chair

## **HONORS & AWARDS**

- Baylor University Dean's List
- Baylor University Distinction Award

Recipient, Baylor Association of Computing Machinery Endowed Academic Scholarship