

ARTHUR LOBOWICZ

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EDUCATION

Grambling State University

Grambling, LA

B.S. in Computer Science, GPA: 3.96/4.0

Expected Graduation: May 2028

Relevant Coursework: Object-Oriented Programming, Data Structures, Linear Algebra, Intro to AI, Computer Architecture

Awards: President's List (all semesters), Academic Achievement Award Scholar, TMCF Scholar

Certifications: CompTIA CySA+ & Network+, Google Cybersecurity Professional Certificate, IBM Cybersecurity Analyst

Technical Skills

Languages: JavaScript (ES6+), TypeScript, Python, SQL, HTML5, CSS3, Java

Frameworks & Libraries: React, Node.js, Express.js, Tailwind CSS, OpenCV

Developer Tools: Git, GitHub, VS Code, Webpack, Jest, npm, Linux CLI, Google Cloud Platform, Docker, Firebase, Cursor

EXPERIENCE

AI & Full-Stack Research Assistant | Grambling, LA

Feb 2025 – Present

- Led technical development for a 15-person AI research lab, debugging Python environments, codebases, and development workflows to unblock experiments and accelerate research iteration.
- Developed a Python-based anomaly detection tool using OpenCV and Isolation Forest, as measured by **reducing manual monitoring effort by 80%**, by automating pattern recognition across the lab's data streams to replace a manual review process.
- Architected and deployed virtualized research infrastructure with Proxmox VE, creating standardized build procedures and architecture documentation for repeatable team onboarding and deployment.

AI4ALL Ignite Fellow

June 2026 – Present

- Developed an air-quality prediction pipeline on 9,358 multisensor observations, benchmarking Linear Regression, Random Forest, and XGBoost to achieve an R^2 of 0.82 on held-out CO concentration data.
- Engineered a preprocessing pipeline for time-series sensor data, resolving ~15% missing-value flags and eliminating a >90%-missing feature to improve downstream model reliability.
- Built a Streamlit analytics dashboard for hourly, daily, and seasonal pollution trends, translating model outputs and correlation analysis into interactive visualizations.

PROJECTS

Agentic Cyber Automation System | [GitHub](#)

- Reduced research-task execution time by 75%, from ~72 seconds manually to 18 seconds, by building a Python multi-agent orchestration system with AutoGen and coordinator-worker task delegation.
- Engineered a provider-agnostic LLM integration layer, as measured by support for **3 interchangeable backends** (OpenAI, Groq, self-hosted Ollama) with zero code changes, by abstracting model configuration behind a unified interface and environment-driven config loader.

Learning Management System (LMS) | [GitHub](#)

- Led frontend architecture on a **3-person team** for a full-stack learning platform, as measured by **2 fully synced role-based dashboards** (student, teacher) served from a single FastAPI backend, by building a React/TypeScript UI with real-time data flow between both interfaces.
- Architected a reusable React/TypeScript component system shared across course, assignment, and grading workflows, reducing duplicate UI logic across two role-based dashboards.

VisionCare – Eye Exam Simulation & Scoring Web App | [GitHub](#)

- Co-developed a full-stack remote eye-exam platform connecting a mobile camera interface to a clinician dashboard through a Node.js/PostgreSQL backend, enabling synchronized patient examination workflows across two devices.
- Built a session-accurate results pipeline, as measured by **100% of exam results correctly logged and attributed** to the right patient account, by implementing authenticated user dashboards with organized, longitudinal session storage.

EXTRACURRICULAR ACTIVITIES & AFFILIATIONS

Leadership & Affiliations: ColorStack Academic Chair • ACM Academic Chair • President, Cybersecurity Secure Club • NSBE • CodePath • [Published Paper](#), Oxford Scholastica