

Layla Aure

SUMMARY:

Computer Science graduate with experience developing full-stack applications, developer tools, and AI-integrated software. Built software used by 250+ users, including a Python attendance system and a browser-based coding platform. Strong foundation in software engineering, systems, and scalable application development.

EDUCATION:

James Madison University

May 2026

Bachelor of Science - Computer Science

GPA: 3.622 | President's List (Spring 2026) | Dean's List (All Semesters)

Relevant Coursework: Algorithms & Data Structures, Discrete Structures, Computer Systems, Software Engineering, Database Systems, Applied Algorithms, Programming Languages, Operating Systems, Web Development

TECHNICAL SKILLS:

Programming Languages: Python, Java, C, C++, C#, JavaScript, SQL, Ruby, HTML/CSS

Web & Frameworks: React, Vue.js, Node.js, Express.js, Flask, REST APIs, Vite

Tools & Technologies: Git, GitHub, GitHub Actions, Linux, Bash, PostgreSQL, MySQL, AWS (S3, CloudFront), Cloudflare, Nginx, PM2, OIDC/IAM, Google Sheets API, PyInstaller

Technical Concepts: Full-Stack Development, API Integration, Client-Server Architecture, CI/CD, Object-Oriented Programming, Cloud Computing, Agile Development, Scrum, Accessibility (WCAG)

Certifications: CIW Site Development Associate | IBM SkillsBuild AI Certifications (6x)

PROJECTS:

Personal Portfolio Website - layla-aure.com

May 2026 - Present

- Developed a responsive portfolio website (20+ pages) using semantic HTML, CSS, and JavaScript with reusable components, dark mode support, and accessible navigation
- Designed and deployed cloud infrastructure using AWS S3, CloudFront, Cloudflare, GitHub Actions CI/CD, and IAM OIDC authentication

Splatbot Game - *Coding Outreach*

Mar 2026 - Present

- Developed a browser-based competitive coding game to make programming accessible for JMU CS students
- Engineered a JavaScript game engine with SVG rendering and sandboxed in-browser Python bot execution using Pyodide and Web Workers to securely isolate user-submitted code
- Designed core gameplay systems, bot APIs, UI components, and persistent client-side settings
- Organized and hosted the inaugural Splatbot tournament fundraiser, attracting 30+ participants, 50+ attendees, and 60+ live matches
- Used Git and Jira for version control, sprint planning, feature tracking, and collaborative development workflows

Jarvis AI Home Network - *Hackathon Project*

Apr 2026

- Built a voice-driven AI assistant in under 24 hours, integrating Spotify, calendar, and smart-home systems
- Developed a Node.js/Express backend with REST APIs for scheduling, chat history, and device control
- Created a React frontend with an AI interface and dynamic system prompts
- Integrated Google Calendar API, Home Assistant webhooks, and LLM tool-calling workflows for automation

Social Network Platform for Spanish Speakers - Full Stack App

Jan 2026 - May 2026

- Designed and implemented RESTful APIs for authentication, user management, and content interactions using Node.js and Express.js
- Developed relational database schemas and optimized SQL queries for user, post, and engagement data
- Implemented authentication, authorization, and secure credential management practices
- Deployed and maintained a production backend on Linux using Nginx and PM2 for a social platform serving 20+ university students

Terminal-Based Spreadsheet - Ruby Program

Jan 2025 - May 2025

- Built a terminal-based spreadsheet in Ruby featuring a full lexer, parser, and formula evaluation engine supporting nested expressions, with interactive grid editing via Curses

Teaching Assistant Database - Web App

Aug 2024 - Dec 2024

- Designed a MySQL database schema and built a Flask-based web interface for managing TA records
- Validated the system against 100+ records, demonstrating reliable CRUD operations and query performance across realistic data volumes

EXPERIENCE:

Independent Software Developer, JMU Pep Band

Sep 2025 - Present

- Engineered a cross-platform attendance tracking system in Python used by 250+ members across 70+ events
- Integrated Google Sheets API to automate attendance validation, record categorization, and report generation workflows
- Packaged and distributed executables for macOS and Windows using PyInstaller
- Applied Agile/Scrum methodologies in Jira to manage sprint planning, task tracking, and project deliverables

VEX Robotics Mentor, Enginotic 6 Robotics

May 2019 - May 2022

- Guided teams in mechanical design, programming, problem-solving, competition strategy, and time management
- Mentored teams that qualified for State and World Championships

INVOLVEMENT:

CS Faculty Search Committee, JMU

Sep 2025 - May 2026

Student Representative

- One of two undergraduates selected to participate in faculty candidate evaluation and interviews

Competitive Programming Club, JMU

Aug 2024 - May 2026

Social Chair: Aug 2025 - May 2026

- Organized technical events and increased member engagement
- Solved algorithmic problems on platforms like Kattis

Hobbies/Interests - JMU Bands | Madison Motorsports | Competitive Gaming