# Daniel Mamuza

# hello@danielmamuza.com | GitHub | LinkedIn | Portfolio

### **EDUCATION**

University of Nevada, Las Vegas

Aug 2023 - May 2027

Bachelor of Science in Computer Science, Minor in Mathematics, Dean's List

GPA: 3.8 / 4.0

Relevant Coursework: Object Oriented Programming, Data Structures and Algorithms, Systems Programming, Computer Organization, Programming Languages, Operating Systems

### **EXPERIENCE**

### **Software Engineer Intern** | *Intellimind*

Nov 2024 - Present

- Engineered a real-time chat messaging feature using WebSockets and AWS Lambda, enabling low-latency, one-on-one communication and scaling to support 1,000+ concurrent users.
- Developed a frontend chat context using Jotai for state management, creating custom hooks for handling REST API calls and WebSocket configuration, enabling efficient real-time message updates and seamless user interactions across the application.
- Built efficient backend REST APIs in Python with AWS DynamoDB and API Gateway, optimizing data flow and reducing delivery time by 25%.
- Collaborated with a team to automate credit report generation, leveraging Amazon Bedrock for AI-driven HTML creation, converting structured content to PDFs using WeasyPrint, and storing documents in S3 for scalable access.

## Computer Science Teaching Assistant | University of Nevada, Las Vegas

Aug 2024 - Present

- Tutored over 200 students in C++ object-oriented programming and Linux across 10+ assignments.
- Conducted 10 weekly office hours to assist students with debugging, code optimization, and algorithm efficiency.
- Collaborated with professors to grade assignments using detailed rubrics, ensuring consistent evaluations with constructive feedback.

#### **PROJECTS**

Monk | TypeScript, Next.js, Tailwind CSS, PostgreSQL

Jun 2024

- Developed a full-stack Kanban board and note-taking SaaS app for task management, integrating user authentication and role-based access control with Clerk to enhance security and support multi-user functionality.
- Managed database schemas to ensure scalability and data integrity for user CRUD operations with Prisma ORM and PostgreSQL via Supabase, supporting hundreds of users and 50 interactions per second.
- Enhanced data handling and backend interactions by 40%, through the implementation of dynamic routing, API routes, middleware, and server actions.

### Jerald Bot | Python, Discord.py, OpenAI API, Giphy API

May 2024

- Built a customized Discord chatbot using Discord.py that specializes in personalized plant-related inquiries.
- Integrated the OpenAI API for context-aware, personalized responses and the Giphy API for dynamic GIFs, enhancing user experience and engagement through natural language processing and relevant visual content.
- Acquired hands-on experience in API design and integration, managing asynchronous requests to ensure seamless communication between Discord, OpenAI, and Giphy services.

## Lord of the Rings Esolang | TypeScript, Deno

Feb 2024

- Engineered an esoteric interpreted programming language with a robust tokenizer, parser, and lexer, demonstrating compiler design and language implementation proficiency.
- Designed a comprehensive expression evaluation module that assesses strings, objects, booleans, and numbers.
- Implemented a transcription tool for ".lotr" files and a REPL mode for real-time command execution, facilitating user interaction and streamlined debugging processes.

### **LEADERSHIP**

### Webmaster | AI & Data Science Club

Sep 2024 - Present

• Developed and maintained the <u>club's website</u> using React and Tailwind CSS, enhancing user experience and functionality to support club activities and events.

### **Webmaster & ICPC Competitor** | *ACM UNLV*

Jul 2024 - Present

- Achieved a 25% improvement in Lighthouse performance, accessibility, and SEO scores, by overhauling <u>ACM UNLV's website</u> using Next.js.
- Competed in the South California regional ICPC 2024, demonstrating expertise in algorithm design and problem-solving while collaborating with teammates to tackle complex challenges.

#### **SKILLS**

**Languages:** C++, C#, HTML/CSS, TypeScript/JavaScript, Python

Technologies: Astro, AWS Lambda/API Gateway/DynamoDB, Figma, Git, Next.js, Prisma, React.js, Tailwind CSS