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, Discrete Mathematics, Computational Linear Algebra, Calculus

EXPERIENCE / LEADERSHIP

Lead Software Engineer | AI & Data Science Club

Sep 2024 - Present

- Led the development of the club's website and future software projects, managing technical direction, code quality, and the project lifecycle.
- Coordinated a team of three engineers, delegating tasks, reviewing code, and ensuring project milestones were met efficiently while promoting collaboration and skill development.

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.

Vice President of Project Development & ICPC Competitor | *ACM UNLV*

Jul 2024 - Present

- Achieved a 25% improvement in Lighthouse performance, accessibility, and SEO scores, by overhauling <u>ACM</u> <u>UNLV's website</u> using Next.js.
- Directed two open-source projects, fostering effective collaboration among 4 members, and ensuring project goals were met on schedule.
- Engaged in rigorous preparation for the South California regional ICPC 2024, concentrating on algorithm design and problem-solving techniques, while collaborating with teammates to refine approach to complex challenges.

PROJECTS

Monk | TypeScript, Next.js 14, React.js 18, 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.

SKILLS

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

Technologies: Astro, Git, Next.js, Prisma, React.js, Tailwind CSS, Unity Game Engine