# Daniel Mamuza

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

#### **EDUCATION**

University of Nevada, Las Vegas

August 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

# TECHNICAL SKILLS

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

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

# **EXPERIENCE**

Computer Science Teaching Assistant | University of Nevada, Las Vegas

August 2024 - Present

- Tutored over 200 students in C++ object-oriented programming and Linux across 10+ assignments.
- Conducted weekly office hours to assist students with debugging, code optimization, and algorithm efficiency.

# **Software Engineer & ICPC Competitor** | *ACM UNLV*

July 2024 - Present

- Overhauled ACM UNLV's website using React.js and Next.js, enhancing site performance by improving Lighthouse performance, accessibility, and SEO scores by 25%.
- Engaged in rigorous preparation for the ICPC 2024 South California regional competition, 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 | <u>Live Demo</u>

June 2024

- Developed a full-stack Kanban board and note-taking application 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 boards, lists, cards, and notes with Prisma ORM and PostgreSQL via Supabase, supporting hundreds of users and 50 interactions/second.
- Employed dynamic routing, API routes, middleware, and server actions while developing the Monk app, enhancing data handling and backend interactions by 40%.

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

May 2024

- Created a customized Discord chatbot specializing in personalized plant-related questions using Discord.py API configuration.
- 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 | GitHub

February 2024

- Engineered an esoteric interpreted programming language with a robust tokenizer, parser, and lexer, demonstrating compiler design and language implementation proficiency.
- Developed 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**

# **Vice President of Project Development** | *ACM UNLV*

July 2024 - Present

Coordinated the club's 2 open-source projects, promoting effective member teamwork among 4 members.

# **Officer** | AI & Data Science Club

September 2024 - Present

• Advanced club initiatives by coordinating professional outreach, moderating discussions, and supporting member-led AI and data science projects, contributing to a collaborative and educational environment.