Roberto (André) Mossi Milla

Erie, Pennsylvania, 16506 • 814-790-1591 • mossiroberto0392@gmail.com • andremossi-linktree.vercel.app • github.com/AndreM222

SUMMARY

Full-Stack Developer with a B.S. in Computer Science. Experienced in academic research, industry internship, and independent projects. Developed side projects, completed online courses, and studied at Gannon University to continuously expand technical expertise.

WORK EXPERIENCE

Dinant, Tegucigalpa, Honduras

Full-Stack Developer, June - July 2023

- Designed and managed SQL databases containing thousands of client records, including systems for tracking machinery conditions across multiple companies and streamlining product purchase, status, and plan management to improve client interactions.

- Developed web applications using Oracle APEX, JavaScript, CSS, and HTML for business clients. Projects included:
  - A digital contract generator with real-time field updates based on user input and permissions.
  - A factory worker assistance app that recommended optimal helpers based on user profiles and submitted requests.

- Collaborated with stakeholders to plan, design, and release multiple web applications into production.

Gannon University, Pennsylvania, United States

Research Assistant, August 2024 - May 2025

- Collaborated with a professor on research simulating organisms to study natural selection under environmental constraints.

- Implemented NeuroEvolution of Augmenting Topologies (NEAT) to enable entities to evolve neural architectures through reinforcement learning for task-solving.

- Utilized C++, CUDA, CMake, and Unreal Engine to develop AI-driven organisms and analyze their survival behavior in a "tag" simulation environment.

- Research paper accepted and published by the American Society for Engineering Education (ASEE) and presented at a Sigma Xi conference at Penn State University.

Computer Vision Engineer (Project-Based) Industry Partner (NDA), August 2024 - May 2025

- Designed and implemented a camera-based traceability system to detect and track pallets in real time using YOLO (Ultralytics) object detection.

- Built an event-driven pipeline that captured images and detection metadata when pallets passed through cameras, enabling damage and anomaly detection.

- Developed a full-stack web application (React, JavaScript) to visualize detection events, images, and analytics stored in TimescaleDB.

- Containerized and deployed services using Docker, integrating components written in C++, Python, and Rust.

Teacher Assistant, August - December 2024

- Volunteered as a Teaching Assistant, supporting students by answering questions, clarifying concepts, and reinforcing course material during class sessions.

Student Technician, August - December 2022

- Worked at the IT department of the university. Was responsible for giving assistance in technology related issues to students and professors 5 days a week.

EDUCATION

Gannon University, Pennsylvania, United States

Bachelor of Science in Computer Systems Engineering, May 2025

Harvard University, Online

CS50's Introduction to Computer Science, December 2022

Extreme Networks, Online
Introduction to Future Networks, May 2022

ADDITIONAL SKILLS

- Proficient in PowerShell, Bash, and NVim.

- Learned React, Next.js, Vite, and Vercel for the deployment and development of my portfolio and link tree website.

- Intermediate level of C++.

- Knowledge about automatization using CMake, bash, powershell, and fish.

- Learned Linux and made a rice Linux setup with the purpose of increasing my knowledge regarding Operating Systems, understanding how a machine works, and being able to read other people's code.

- Written and oral fluency in Spanish.

- Written and oral fluency in English

- Written and oral intermediate in Japanese

QUALIFICATIONS SUMMARY

- 3 years of experience in Windows PowerShell.

- 3 years of experience making games in Unreal Engine.

- 1 year of experience debugging software using Visual Studio, IntelliJ, NVIM, and VSCode.

- 1 year of experience developing software in C++.

- 5 months of experience developing web apps in JavaScript, HTML, and CSS.

- 3 months of experience developing software in Java.

- 3 months of experience developing software in C# and C.

- 2 months of experience developing large scale cloud services.

- 2 months of experience working with Oracle and Oracle Apex.

- 2 months of experience developing websites in NodeJS, React, and Next.js.

- 3 months of experience developing software in Python.

AWARDS AND HONORS

- "School Development Award" award obtained for outstanding development of a videogame using Blueprints in Unreal Engine 4, 2020.

- "School Development Award" award obtained for outstanding development of a videogame using C++ and Unreal Engine 4, 2016.