

ZAKARIA MERZOUGUI

Software Engineer

PROJECTS

Portfolio Website: Built a 4 page-personal website from scratch using HTML, CSS, and JavaScript which contains information about me page, my personal projects page, my resume, and a contact page

Movie Recommender App: Built a movie recommender app using Python libraries and an API that fetches a database of over 5000+ movies to choose from and recommends the Top 5 movies related to the user's choice

Unity Platformer Game: Built a platformer game on Unity using C# for the game and player mechanics which includes; Jumping, Running, Wall Jumping, Death, etc. I personally designed some of the sprites and created animations for the player and objects.

2D Java Platformer Game: Took on a school project where we used Agile methodologies to develop a doodle jump clone using Java. We used a GitHub Repository where we continuously collaborated and effectively communicated to fully develop and publish the game.

High Availability Cluster Program: Developed a high-availability cluster program with both client-server and peer-to-peer implementations. In the client-server model, a central server tracked node availability through heartbeats and updated all clients in real-time. In the peer-to-peer model, each peer monitored other nodes' availability based on received heartbeats.

EMPLOYMENT HISTORY

AI Research Assistant Quinnipiac University	Jan 2025 - Present Hamden
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- Conducted research on AI-powered smart glasses for the visually impaired, leveraging object detection and real-time assistance technologies
- Collaborated with a multidisciplinary team to integrate AI-driven solutions into wearable assistive technology.
- Develop an object detection model using YOLO to assist visually impaired individuals

PEER TUTOR Quinnipiac Learning Commons	Oct 2024 - Present Hamden
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- Mentored students in preparation for exams and coursework, focusing on foundational concepts and advanced applications to ensure success in rigorous academic settings.
- Provided personalized tutoring in advanced STEM subjects (computer science, calculus, discrete math, physics) and language (Arabic), improving students' academic performance and conceptual understanding.
- Developed effective learning strategies tailored to diverse learning styles, resulting in enhanced student engagement and retention of key concepts across a range of technical subjects.

SKILLS

Critical Thinking, Software Development, Time Management, Web Development, API Development, Problem Solving.

EDUCATION

Bachelors Degree Quinnipiac University	Aug 2023 - May 2026 Hamden
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- Honors Program and Dean's List with PGPA of 3.88
- Accelerated 3+1 Program Cyber Security (3 year Bachelors Degree program in Computer Science and 1 year Masters in Cyber Security)
- Member of the Chess Club and Muslim Student Association

LANGUAGES

Arabic (Native)