Kyle Arquilla

kaarquilla@gmail.com | kyle-arquilla.me | GitHub: Karquilla

Education

Kent State University - Stark (Expected Summer 2025)

Bachelor of Science in Computer Science

Relevant Coursework: Software Engineering, CS1-3, Machine Learning, Deep Learning

Bachelor of Business Administration (Completed)

Technical Skills

Languages: C++, Python, JavaScript (p5.js, p5play)

Frameworks & Libraries: React, Next.js

Tools & Platforms: Git/GitHub, Linux Command Line

Experience & Leadership

Undergraduate Researcher - Kent State University

Choose Ohio First Scholarship | IEEE IIoT

Published Research: Explainable AI (XAI) - IEEE

- Contributed to research exploring transparency in artificial intelligence (XAI).

- Collaborated on projects involving industrial IoT (IIoT) and machine learning applications.

Computer Club President - Kent State University Stark

2022 - Present

- Led a technical community, organizing workshops, hackathons, and coding challenges.

- Facilitated student collaboration on programming projects and research.

- Expanded membership and engagement through outreach and networking initiatives.

Projects

LED Matrix Controller

- Python | IoT | Remote Control

- Developed a remote Python client to control an LED matrix over the internet.

- Integrated hardware with real-time command execution.

Robot Arm Controller

- Python | USB Input Handling | Robotics

- Created a robot arm control system using a PC panel media controller.

- Processed raw USB input to map knobs and sliders to movement commands.

Game Development

- JavaScript | p5play | Game Design

- Built an interactive game using p5play.

- Applied principles of game physics and AI-driven movement.

Creative Programming & AI Visualization

- JavaScript | A* Pathfinding | Data Visualization

- Implemented A* pathfinding visualization in JavaScript.

- Developed multiple algorithmic and interactive visualizations.

Portfolio Website

- React | Next.js | Web Development

- Designed and developed a personal portfolio showcasing projects and research.

- Deployed using modern web technologies, ensuring fast performance and responsive design.

Certifications & Achievements

- IEEE Published Researcher - IIoT & XAI

- Choose Ohio First Scholarship Recipient

- Computer Club President (2 Years)