Tamjid Hasin Khan

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EDUCATION

University of California Los Angeles

B.S in Computer Engineering

Graduation Date:

June 17, 2023

University of California Irvine (Ongoing)

Masters in Embedded and Cyber-Physical Systems

Expected Graduation Date:

December 2025

SKILLS

PROGRAMMING

C/C++

Python

C# Linux

GitHub/GitLab

JS/React Native

SOFTWARE

Virtual Machines
Visual Studio / Visual Studio Code
Scripting
Scrum Software Development
ASP.NET Core (MVC)
SQL Database Management
Wireless Communication Protocols

Hardware

Circuit Design Motor Drivers Verilog Raspberry Pi Arduino I2C/SPI

PROJECTS

Visual Studio Code Extension - OML Alexandria

January 2023 - March 2023

- Worked in a group of six on a VS Code Extension for a Software Engineering class
- Created a VS Code Extension that provides language support for Ontological Modeling Language (OML), a systems engineering language developed by OPENCaesar.
- Language Support features in the form of Code Refactoring,
 Syntax Highlighting, Goto Definition, etc.
- Also provides visualization of code using UML-like diagrams.
 Implemented using two different methods: Immediate visualization through Sprotty VS Code, and an OML to UML file converter.

Web Application - YGWeb

September 2023

- Created an ASP.NET Core Web Application for the popular card game Yugioh. The application used a Model-View-Controller design pattern and SQL Database.
- The application allows users to view the full Yugioh card list, from a SQL database of over 12,000 records. The card list view uses pagination and allows filtering options such as filtering by keyword or card type.
- The application allows users to authenticate themselves with standard email and password identities.
- Authenticated users are able to create their own custom Yugioh Decks, save them, and load them as they wish.

Light Swarm IoT Project

September 2024 - December 2024

- Worked on a wireless system involving a Raspberry Pi 5 and 3 ESP8266 devices using UDP packets.
- The ESP devices collected an analog reading from a photoresistor, and communicated with each other to determine which was the Master Device (highest reading)
- The Master Device sent the collected data to the Raspberry Pi 5 through a UDP packet, and the Pi would store and print the data. It would create graphs showing the light values over time and how many seconds each device was Master for. On a button press, the Pi logged the data to a file locally.

Experience

UCI Research Intern

July 22, 2024 - September 23, 2024

- Worked under Professor Al Faruque at the AICPS Laboratory on a project called LLM4SIM. Siemens was also involved in this research project.
- The project was focused on the use of Large Language Models (LLMs) to generate Structured Text Code that can potentially be used in simulation environments.
- Researched various methods to take generated code and test it in a physics engine environment, eventually creating a possible workflow