

Ken Loong Oi

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Education

University of Wisconsin-Madison

B.S. Electrical Engineering, expected May 2023

B.S. Computer Science, expected May 2023

Cumulative GPA 3.713 /4.0

Projects

- **Pipelined Processor**: Pipelined processor designed with Verilog HDL. It uses WiscSP13 instruction set architecture and was simulated on ModelSim.
- **LED Display Cube**: LED cube that displays the vitals of a computer controlled by a Raspberry Pi 3 with an Adafruit RGB Matrix Bonnet. It utilizes C++ LED matrix library and a python script to push CPU stats to the cube using User Datagram Protocol (UDP).
- **RFID Cloner**: Breadboard circuit controlled with Arduino Uno connected to the RC522 module which read and writes at 13.56MHz frequency. C++ code used to create the cloner on Arduino IDE.

Relevant Coursework

ECE 552- Computer Architecture

CS 571- Building User Interfaces

ECE 539- Artificial Neural Networks

CS 577- Intro to Algorithms

Work Experience

Audio/Visual Technician, September 2021 - present

University of Wisconsin-Madison Conference Centers, Madison, Wisconsin

- Proactively communicate with event organizers to set up equipment and troubleshoot on-the-spot malfunctions during events. Emphasizing on excellent customer service.
- Analyze and debug old Crestron hardware using C# code to fix functionality of conference room control interface.

Logistics Coordinator, January- June 2019

P&P PROCESS & PNEUMATICS SDN. BHD., Penang, Malaysia

- Coordinate shipments of Pneumatic and Vision systems to local factories.
- Liaise between warehouse personnel and customer to facilitate account and operational needs.
- Worked FT 40hrs/wk.

Tech Stack/Skills

Full-Stack Development

- HTML5, CSS3, JavaScript, Bootstrap, ReactJs, React-Native, JSON, RESTful API, RxJS, Observable, Google Dialog-flow, Postman API, Figma

Machine-Learning

- Python, TensorFlow, Scikit-learn, NumPy, MATLAB

Systems

- Arduino IDE, Raspberry Pi, LTspice, Verilog-HDL, ModelSim - Intel FPGA Edition, Draw.io, C++, C#, C, Siemen TIA portal

Data Structures

- Java/C#: Linked-List, Stack, Binary Tree, Binary Search Tree, Graph, Hashing, Min/max Spanning Tree, Shortest Path Tree Set

Languages English, Chinese, Malay, Cantonese

Links [LinkedIn](#) [GitHub](#)