Roshni Mathew

EDUCATION

B.S. in Computer Engineering
University of Illinois
Urbana-Champaign,
GPA: 4.0/4.0
August 2022 - Present

Study Abroad
Hiroshima Institute of Technology
May 2023 - July 2023

High School Diploma
Whitney M. Young Magnet HS
GPA: 4.0/4.0
August 2018 - June 2022

COURSES

- Data Structures and Algorithms
- Analog Signals and Systems
- Neuroscience for Engineers
- Multivariable Calculus
- Intro to Differential Equations
- Mechanics/Electricity and Magnetism
- Computer Systems and Programming
- Discrete Structures

HONORS & AWARDS

May 2023 - Dean's List

April 2023 - Clare Boothe Research Scholar

TECHNICAL SKILLS

Languages:
- English
- Japanese (Intermediate)

Programming Languages:
- C/C++ (Intermediate)
- Python (Intermediate)
- HTML/CSS (Intermediate)

Technology
- Arduino (Intermediate)
- Android Studio (Familiar)
- 3D Printing (Familiar)

CONTACT

- 312-802-7878
- roshnimathew04@gmail.com
- roshnim3.github.io
- roshnimathew04

WORK EXPERIENCE

OTCR Consulting - Lead Consultant, Internal Project Manager   SEP 2022 -NOW
- Formulated a pricing recommendation for a med-tech startup, blending market analysis and revenue projections, ensuring the product's optimal positioning.
- Innovated recruitment strategies for a University of Illinois school by creating a multi-faceted plan focused on enhancing the school's appeal to applicants.
- Directed a team of 4-5 consultants, consolidating information from 28 past firm projects into a user-friendly, accessible database

Human Dynamics Control Lab - Research Assistant   JAN 2023-NOW
- Led the conceptualization and development of an app designed to oversee the operation of a robotic arm task trainer.
- Implemented a serial Bluetooth communication protocol, integrating Arduino, HC-05 Bluetooth module, and Android Studio, establishing a seamless wireless connectivity between the app and robotic arm.
- Developing ML algorithms that will help detect stress and anxiety using wearable sensors.

Disruption Lab - Software Engineer   FEBRUARY 2023-NOW
- Engineered a Metaverse initiative utilizing AR/VR technologies to construct a virtual rendition of the School of Business facility, designed to enhance international student engagement with the university.

Engineering Open House - Director of Advancements   MAY 2023-NOW
- Forged a productive partnership with the University Advancements Office and over 15 departments, effectively collaborating to design and execute special events tailored for visiting alumni.
- Coordinated logistics, communications, and activities that enriched the alumni experience and strengthened their connection to the university.

Loyola University of Chicago - Research Assistant   JULY 2022-AUG 2022
- Constructed a robust network file system, enabling seamless access to server files from within the cluster environment
- Developed a dynamic IP address assignment protocol to allocate IP addresses to each Nano, facilitating efficient communication within the cluster.

PERSONAL PROJECTS

Battleship Game   JULY 2023
- Developed a Battleship Game in C++, featuring interactive ship-to-ship combat and player-versus-computer gameplay dynamics.
- Currently engaged in an advanced phase of the project, dedicated to enhancing the computer's attacking algorithm

Robotic Car   MAY 2023
- Collaborated within a team of four members to engineer a robotic car with the ability to respond to loud sounds by changing its direction.
- Designed the complex circuit, combining components from rotor movement to microphone and amplifier configurations.

LED Cube   JANUARY 2022
- Constructed a LED Cube by executing intricate soldering work, meticulously assembling and interconnecting 216 LEDs to craft the cube.
- Diligently working on programming the cube to execute captivating patterns.

VOLUNTEER WORK

Crochet   September 2018-NOW
- Taught over 60 people how to crochet to help teach methods of relieving stress
- Coordinated the collection of 80 crocheted items, all of which were generously donated to local shelters and hospitals.
- Orchestrated various successful fundraisers resulting in approximately $ 2,500 in funds raised for Project Hope and Room to Read