Achu Mukundan

Front-End Development | UX Design | Computer Vision

achuthanmukundan00@gmail.com
(416) 845-4747
achumukundan.me
linkedin.com/in/achu-m
github.com/achuthanmukundan00

EDUCATION

University of Toronto — *B.A.Sc. Computer Engineering*

SEPTEMBER 2018 – PRESENT (2ND YEAR)

Relevant Courses: C, C++, Digital Systems with Verilog Design, Circuit Analysis, Engineering Strategies and Practice

PROJECTS

MGMT — *A project management app for students*

- Created a single-page web app with **Angular**
- Users can create projects, manage tasks and deadlines, and track team members' progress to evenly delegate work
- Decreased load times by **~30%** using a **Google Cloud CDN**
- Utilizes Google **Firebase NoSQL** cloud database to ensure scalability and reliability
- Check it out at *mgmt-15d2d.firebaseapp.com*

AutoBell - *Facial Recognition Doorbell/Security*

- **OpenCV** facial recognition program written in **Python**
- Rings doorbell upon face detection and sends notification to your phone
- Algorithm (Haar Cascades) achieves **accuracy of ~91%**

UofT Hyperloop Team - *Control Systems*

- Designing a distributed architecture to control the pod's various subsystems
- Configuring **32-bit microcontrollers** for state estimation, drive and braking control using **C++**
- Competing at the SpaceX Hyperloop Competition in Summer 2020

Orbis Challenge Hackathon – *Serpentine 2018*

- **Implemented custom search algorithm** to find the shortest path needed to capture the largest area of the game board per move
- Collaborated with one other team member, managed project with **Git**, and wrote the program in **Java**

Comtek Floor Panel Taping – *Project Leader*

- Designed a floor panel taping device for Comtek Advanced Structures Ltd.
- **Managed team** of six engineers
- Performed simulations and prototyping
- Increased Comtek's floor panel output **capabilities by 22%**

SKILLS

Proficient in:

- C/C++
- JavaScript/TypeScript
- HTML/CSS
- MATLAB/Octave
- XML

Familiar with:

- Verilog
- Java
- Python

FRAMEWORKS/TECHNOLOGIES

- Angular
- Firebase
- Arduino
- Android
- Git
- Linux/Unix
- OpenCV
- GDB

AWARDS

President's Scholarship of Distinction 2018

LANGUAGES

English, Tamil, and French