

# NISHANT KOTHARI

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## Education

### University of Michigan Ann Arbor

BSE Computer Science  
BBA Technology and Operations  
GPA: 3.493/4.0  
Sep 2018 – May 2022

### Hong Kong University of Science and Technology

International Scholars Abroad Program  
Jun 2019 – Aug 2019

## Skills

### Languages

C++	Python
Javascript	SQL
Swift	HTML
CSS	MATLAB

### Technologies

React	Git
Docker	CMake
Vapor	Jupyter
	Notebooks

## Relevant Coursework

- Computer Vision (In-Progress)
- Autonomous Robotics (In-Progress)
- Advanced Data Structures and Algorithms
- Computer Organization
- Operating Systems
- Database Management Systems

## Awards

University of Michigan College of Engineering Dean's List  
Jan 2019 & May 2019

DECA International Career Development Conference Advertising Campaign Top-10 Exam Score  
Apr 2018

## Experience

### University of Michigan

#### Full Stack Developer / Programmer I

Ann Arbor, MI

Mar 2020 – Present

- Building endpoints for an online exam server used to administer exams to 2000+ University of Michigan students per semester, allowing faculty to adapt courses to the COVID-19 pandemic ([Crabster Exam Server](#))
- Developing tools which allow faculty to review student usage data and remotely access student view of the exam to assist them in real time and to automate the deployment of randomized exams
- Designing client side React application to provide an exam taking interface including lightweight code editor. This editor enables students to write code in C++ style format and to view questions and associated reference material side-by-side

### University of Michigan Computer Science

#### Undergraduate Teaching Assistant

Ann Arbor, MI

Sep 2019 – Present

- Leading a weekly lab session to help students in EECS 280 (Programming and Elementary Data Structures) apply the knowledge from lecture to coding problems
- Holding office hours to coach students, help debug their projects, and review materials for exams
- Working with professors and other teaching assistants to develop midterm and final exams

### Distributed Universal Satellite Technology

#### Undergraduate Research Assistant

Ann Arbor, MI

Jan 2019 – Jan 2020

- Wrote tests that measure the effectiveness of Mesh Networking protocols for use with Cube satellites (Project funded by NASA's Jet Propulsion Laboratory and the University of Michigan)

## Projects

### Voluntutors (Non-Profit)

Jul 2020 – Present

- Developed the frontend of a responsive web application that connects low income school districts and parents with free online volunteer tutors ([voluntutors.us](https://voluntutors.us))

### MNIST Deep Learning Classifier (Personal)

May 2020 – Present

- Wrote a Single Layer Perceptron to classify handwritten digits from the MNIST Database to learn the basics of Machine Learning and Computer Vision
- Current success rate of the classifier is 90.79%.

### Operating System Kernel Fragments (School)

May 2020 – Aug 2020

- Implemented in C++: thread library for multi-threaded programs, memory manager for abstracting processes' address space, and network file server for users to perform CRUD operations on their files.

### Computer Organization Applications (School)

Jan 2020 – Apr 2020

- Implemented in C: A simulator with a cached memory system for running machine code, a linker for combining object files, and an assembler for converting assembly language into object files.