# KASRA MADAYENI

## **Education**

## **University of Toronto**

Jun 2020

Master of Applied Science **Electrical Engineering** 

Thesis: Cellular-Based Localization of Mobile Devices with Structured Motion

## **University of Tehran**

Feb 2017

Bachelor of Science **Electrical Engineering** Thesis: Cloud Computing and its Application in Software Defined Networking



### **Technical Skills**

HTML CSS Java Script Python

SQL (Postgresql) NoSQL (MongoDB)

NodeJs C++ Matlab

#### **Libraries & Frameworks**

ReactJs ExpressJs Bootstrap

#### Soft Skills

Communication Team Work Creativity

Time Management Problem Solving

## **Experience**

#### Freelancing Sep 2017 - Sep 2021

- Designed and developed portfolio websites for clients and friends
- Received excellent feedback

#### **Uni of Toronto** Sep 2017 - Jan 2020

Research Assistant

 Developed and evaluated two algorithms for localization of moving objects using Python and Machine Learning

Teaching Assistant

· Assisted undergraduate students in basic and advanced computer science courses

#### Chegg Jan 2018 - Jan 2020

Computer Science Tutor

- Helped and assisted more than 150 students in computer science
- Taught C++, Java, Pvthon, Front end web development, and Data structures
- 100% satisfaction and positive reviews

## </>> Projects

## **Full Stack MERN Blog Application**

Code | | Website |

Used: React, MongoDB, NodeJs, Express, REST API

- Implemented CRUD operations in front-end and back-end
- Developed authentication, authorization, and private routes
- Designed a completely responsive layout using React
- Managed the state of the application using Redux Toolkit

## PERN E-Commerce for Music Selling (Code) | (Website)

Used: React, PostgreSql, ExpressJs, Styled Components

- Developed and Designed a full stack application
- Enabled shopping musics using PayPal and Stripe API
- Managed the state of the application using Redux Toolkit

## Sorting Visualizer

Code | | Website

Used: VanillaJs, Data Structures & Algorithms

- Implemented Quick Sort, Merge Sort, Selection Sort, Insertion Sort, Bubble Sort, and Bucket Sort
- · Designed and built a responsive UI for visualizing the algorithms

#### **Puzzle Games**

Code H Website

Used: VanillaJs, OOP, SOLID principles

- Implemented several 2D puzzle games
- Applied the Clean architecture and OO paradigms

## Volunteer Experience

## **Vice Chair of IEEE Student Branch**

Sep 2015 - Sep 2016

University of Tehran

- Held weekly meetings and managed tasks for 50 members
- Scheduled classes, seminars, workshops, etc. for students
- Entitled as the **best** student branch in the country

#### **President of Scientific Association**

Accepted in Uni of Tehran - Tuition Waved

Sep 2015 - Sep 2017

University of Tehran - Electrical & Computer Engineering

- Consulted students in choosing their path and courses
- Scheduled weekly seminars and invited guest speakers
- Entitled as the best scientific association in the country

## Honours & Awards

Research Fellowship for Intn'l Students Nov 2017 - Nov 2019 Edward S. Rogers Sr. ECE Fellowship Sep 2017 - Jan 2020 Accepted in Uni of Toronto (1st in Ca - 16th Globally) Sep 2017 Exempted from Master's University Entrance Exam Jan 2017

Publication

## **IEEE Conference Paper**

May 2016

Sep 2012

Fairness Analysis of MAC Protocols in MIMO Networks using Stochastic Geometry