

# Tegveer Singh

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## Education

**Pursuing Bachelor of Engineering – Software Engineering** **Currently enrolled**  
**Ontario Tech University (University of Ontario Institute of Technology)**

- Currently leading a team for Capstone Project: Design and Development of Object Detection Algorithm for the term 2021-2022
- Part of Dean's Honor List with a Cumulative GPA of 3.98
- IBM certificate for Django Application Development with SQL and Databases
- Udemy Certificate for Advanced C++ Programming Training

## Academic Involvement- Ontario Tech University

**Undergraduate Research Associate** **May 2021 – Present**  
**Ontario Tech University**

- Made significant contributions as an author to a Research paper on Dynamic Kalman Filter-based velocity tracker for intelligent vehicles
- Worked on a machine learning algorithm in OpenCV C++ to detect obstacles in real-time
- Designed and Developed Scheduling and Routing Algorithms for an open-source low power Network Simulator in JavaScript
- Created Scripts in Python to get statistics from GitHub API about large scale repositories

## Highlights of Qualifications

### Software Skills

- Python – Django, TensorFlow, Flask, GitPython, OpenCV-Python
- JavaScript – React, Node, Express
- Other relevant programming languages: Java, C, C++
- Web programming: HTML5, CSS, PHP
- Database Management: SQL, GraphQL, MongoDB
- Knowledge of Linux, Bash and Powershell Scripting

### Other Technical Skills

- Proficient in use of Data structures and Artificial Intelligence algorithms
- Knowledge of Software Testing and algorithm analysis
- Experience with System calls and Multiprogramming in C
- Notable experience with CAD designing on Solidworks
- Proficient in generating Reports, Presentations, Bill of Materials and Gantt charts

### Interpersonal Skills

- Exceptional communication skills improved through multiple course presentations
- Well-honed leadership skills developed through taking lead in group work
- Strong critical thinking, time management, adaptability, and problem-solving skills

## Project Experience

### Development of Social Networking Website

September 2021

- Technologies used: MongoDB, Express, React, Node, GraphQL
- This is a social networking website I created as an attempt to learn MERN Stack of Web App Development
- The site has features including commenting, posting and handles main logic using React

### Development of a Navigation System

March 2021

- Created a navigation system to generate optimum route between 2 places in Ontario
- The website was hosted using Flask and took user source and destination as input
- Used Dijkstra's algorithm and Python machine learning libraries to calculate shortest path

### Design and Development of the game of Connect4 with AI bot

February 2021

- Created the game of connect 4 in Python and designed an Artificial Intelligence algorithm to compete with the user
- Used the Python library Pygame to design the GUI
- Used libraries Pytest and coverage to perform unit testing and static analysis

## Work Experience

### Part-time Junior JavaScript Developer

May 2020 –

August 2020

#### Intouch Guru Solutions

- Technologies used: JavaScript, HTML, CSS
- Assisted Senior consultant with database management and coding in JavaScript
- Communicated with clients and documented requirements

### Peer Tutor

September 2020 – April 2021

#### Ontario Tech University

- Tutored students in engineering courses I previously excelled in
- Assisted in problem solving and studying techniques
- Communicated with pass leaders to create a well-coordinated learning environment

### Manager

April 2019 – October 2019

#### Marigold Indian Bistro

- Supervised and superintended a team of multiple servers to provide customer satisfaction
- Great organization skills developed through handling phone calls and cash transactions
- Calculated weekly sale statistics and ensured proper cleanliness measures were taken

### Cashier/Grill Chef

May 2019 – August 2019

#### Harveys

- Received proper training and worked at the grill and fryer to prepare food for customers
- Developed superior time management skills to adapt quickly to fast paced environment
- Ensured satisfactory food quality and proper hygienic measures were maintained