

Hitansh Bhatt

hitansh.bhatt@mail.utoronto.ca

EDUCATION

UNIVERSITY OF TORONTO
BASC IN COMPUTER ENGINEERING +
PEY Co-OP (INTENDED MINOR IN
ARTIFICIAL INTELLIGENCE
ENGINEERING BUSINESS
April 2025 (Expected) | Toronto, ON

UNIONVILLE HIGH SCHOOL
OSSD
June 2021 | Markham, ON

LINKS

Github: **Hitansh Bhatt**
LinkedIn: **Hitansh Bhatt**
Personal Website: **Hitansh Bhatt**

RELEVANT

COURSEWORK

Computer Algorithms and Data
Structures (incl. Pointers, Trees, Graphs,
Hash Tables, etc.) in C and C++
Object-oriented programming in C++ and
Java
Calculus (I, II, and III)
Advanced Engineering Mathematics
(Complex Analysis, Differential Eqns)
Linear Algebra (MATLAB)
Digital Systems (Verilog)

SKILLS

PROGRAMMING

Java, C, C++, Python, MATLAB, Verilog,
HTML, CSS, Javascript

OPERATING SYSTEMS

Linux

IDES

Visual Studio, Visual Studio Code, Eclipse,
NetBeans

OTHER

Github, GitLab, Microsoft Suite, Quartus

EXPERIENCE

UNIVERSITY OF TORONTO AEROSPACE TEAM | SOFTWARE DEVELOPER

September 2021 - Present | Toronto, ON

- Developing a GPS coordinate reporting algorithm to track the position of an UAS using the BN-220 GPS module.
- Responsible for developing an algorithm to receive ECEF (Earth-Centered, Earth-Fixed) coordinates that works with existing code in the repository.
- Working with Raspberry Pi to setup remote workspace

UNIVERSITY OF TORONTO SPORTS ANALYTICS GROUP | SOFTWARE DEVELOPER

July 2021 - Present | Toronto, ON

- Developed a web scraping algorithm to scrape data from sports websites for analysis and research.
- Currently working on developing an algorithm to analyze player statistics to determine the best fielder in the game of cricket.

PROJECTS

XOR ENCRPYTION | C

April 2022

- Developed a program in C that performs encryption and decryption using the basis of XOR.
- Used data structures such as pointers, linked-lists, etc. to perform operations such as compression and decompression on encrypted strings.
- Used Valgrind to check for and correct memory leaks, and increase the efficiency of the code during the testing stage.

SEMANTIC SIMILARITY | PYTHON

December 2021

- Developed an AI algorithm in Python to approximate the semantic similarity (closeness of their meanings) of any pair of words and accurately determine synonyms
- Learnt to efficiently write code as one of the requirements of the project was for the run-time to be lesser than a certain threshold.

MATBOARD BRIDGE DESIGN SIMULATION | MATLAB AND PYTHON

November 2021

- Developed code in MATLAB and Python to calculate sectional properties and output graphs for BMD's and SFD's to build a bridge made using matboard
- The code accurately predicted the failure load and the cause of the failure; Actual failure load: 431 N, predicted failure load: 405 N. Actual and predicted cause of failure: shear buckling
- Learnt to visually represent calculations via MATLAB

AWARDS

2022	Ian & Shirley Rowe Award, Cash Prize: CAD 1000	University of Toronto
2021	Certificate of Achievement (>90% average)	Unionville High School
2021	Mentorship Acknowledgment	NSBEHacks UofT
2020	Computer Science Subject Award (Course mark: 100%)	Unionville High School