# HETAV PANDYA

Toronto, CA · pandyahetav1@gmail.com · (416) 826-4057 · www.linkedin.com/in/hetav-pandya

#### EDUCATION

# University of Toronto

Toronto, CA

Bachelor of Applied Science and Engineering, Computer Engineering GPA: 3.97 Sep 2019 - May 2023

# WORK EXPERIENCE

# Intel Canada - [Data Center and AI Team]

Toronto, CA

Software Engineering Intern

May 2021 - Aug 2021

- Maintain the core C++ source code for Quartus Prime Software.
- Built a testing infrastructure for sub-systems using perl and tcl scripts.
- Working on adding new features to the core C++ framework for future releases.

# Bell Canada - [Big Data and AI Team]

Toronto, CA

May 2021 - Aug 2021

Data Scientist Intern

- Data querying using Apache Spark, Hadoop, and Impala. Data exploration using Python.
- Converted Impala queries to Trino reducing the time taken by 60% on average.
- Developed an automated system to detect potential flaws in new version releases, reducing detection time from 3 weeks to 15 minutes. Results were shared using MicroStrategy BI.

# General Motors Canada (GM)

Toronto, CA

Machine Learning Model Developer

May 2021 - July 2021

- Worked on automating data collection pipeline with data pre-processing and image augmentation.
- Deployed an object detection model using transfer learning on 'my\_ssd\_mobnet'.
- The model was optimized for real time detection with a mean Average Precision (mAP) of 0.7.

# Faculty of Information, University of Toronto

Toronto, CA

Data Analyst Research Intern

Jan 2021 - May 2021

- Analyzed the effects of machine learning on the future path of job creation and disruption.
- Collected raw data from research conferences, package databases and via webscrapping.
- Pre-processed data and generated visualizations for further analysis.

# Engineering Outreach, University of Toronto

Toronto, CA

 $Software\ Content\ Specialist$ 

Feb 2020 - May 2020

- Designed the "Computer Imaging using Python" and the "Data Analytics using MATLAB" courses
- The courses were made for the DEEP program, which is an educational program offered by UofT.

# SKILLS

Programming Languages: Python, C++, C

Hardware Design: Verilog, ARM Assembly, Compiler and FPGA Design, Quartus Prime

Machine Learning: TensorFlow, OpenCV, Kubeflow

Data Analysis: Hive, Impala, Trino/Presto SQL, MATLAB, MicroStrategy BI, Hadoop

Project Management: JIRA, Confluence, Agile - SCRUM, Git, GitHub

Web Design: HTML5, CSS3, Javascript (Basic)

# Extra Curriculars

## **UofT Machine Intelligence Student Team**

Toronto, CA

 $Co ext{-}President$ 

July 2021 - July 2022

- Managing a team of 180+ active members spread across nine departments using JIRA software.
- Driving collaboration with different clubs and organizations like the Engineering Hatchery, UCL Artificial Intelligence Society, AI@MIT, Harvard Open Data Project and many more.
- Overseeing event planning and proper execution of inter-departmental and outreach events.
- Collaborating with industry partners and professors for hosting events and workshops.

VP Academics

Toronto, CA Jan 2021 - July 2021

- Planned the execution for academics events and workshops.
- Organized regular project director meetings to provide technical & logistic guidance.
- Previously held the position of Assistant Vice President and was promoted in January 2021.

#### Projects

ECE-Hustler C language, ARM Assembly, DE1-SoC board

https://tinyurl.com/d38wrur3

In this game you are an ECE student in the 4th semester at UofT trying to dodge the hurdles we faced! It is an obstacle course compiled using the ARM processor and displayed on a VGA display.

E-Motion Python, OpenCV, Selenium

https://tinvurl.com/cvhtt8ir

A computer vision suite that enables users to play games, read e-books and listen to music using hand gestures. It secured the second place at UofT Hacks VIII

COVID-19 InfoBot Python, Selenium, Speech Recognition

https://tinyurl.com/ub8uyavj

A voice assistant that provides users with credible and updated information regarding the COVID-19. It won the Wolfram award at the Hack The Virus Hackathon.

Hands2Ears Python, OpenCV, Speech Recognition

https://tinyurl.com/65ftaddu

A neural network model that helps converting sign language (ASL) to speech in real time. It was chosen as the Bloomberg Challenge winner and second best project in NSBE Hacks 2020.

Personal Website HTML5, CSS3, Javascript

https://pandyah5.github.io/

A more detailed and informal description of who I am. Built using raw HTML, CSS and PHP from scratch.

Magnum Opus Python, Neural Style Transfer, OpenCV

https://tinyurl.com/8j9hs2hx

My personal journey of finding "art in mathematics" and "mathematics in art".

# Awards

# Microsoft Discover AI Challenge on AI Ethics - First Prize

Microsoft

Recognized for the AI Ethics Pipeline built during the Hackathon.

June 2021

## University of Toronto Dean's Honor Award

University of Toronto

Awarded for my consistent academic standing above 3.5 GPA in all semesters.

May 2021

# **UofT Hacks VIII - Second Prize**

UofT Hacks

Recognized for my project E-Motion and my work on computer vision enabled remote monitoring and Feb 2021 control.

Edward S. Rogers Dept. of Computer Eng. Top Student Award University of Toronto Awarded for being amongst the top three students in the Department of Electrical and Computer Engineering.

# Wallberg Undergraduate Scholarship Award

University of Toronto

Awarded for being amongst the top four students in the Faculty of Engineering, based on academic performance. Sept 2020

Wolfram Award Hack The Virus Hackathon

Recognized for my project COVID-InfoBot based on speech controlled information system. Aug 2020

# NSBE Hacks 2020 - Second Prize

NSBE UofT

Recognized for my project Hands2Ears, real time ASL to speech conversion.

Feb 2020

## **Bloomberg First Time Hack Winner**

Bloomberg

Recognized for my project Hands2Ears - "First Time Hack" sub-category at NSBE Hacks 2020. 2020

# State Topper

Central Board of Secondary Education

Awarded for receiving the highest grade in the province/state of Gujarat for the Annual Grade-12 Examination in India. March 2019

# University of Toronto International Scholar's Award Scholarship

University of Toronto This prestigious award is provided to students who demonstrate excellence in academics and a strong desire to learn by participating in a wide range of extracurriculars. May 2019