

HETAV PANDYA

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EDUCATION

University of Toronto Toronto, CA
Bachelor of Applied Science and Engineering, Computer Engineering *GPA: 3.96* Sep 2019 - May 2023

WORK EXPERIENCE

Bell Canada - [Big Data and AI Team] Toronto, CA
Data Scientist Intern May 2021 - Aug 2021

- 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.
- Performed feature importance ranking using boosted decision trees and statistical measures.
- Developed an automated system to detect potential flaws in new version releases, reducing the time needed to detect issues from 3 weeks to 15 minutes. Results were shared using MicroStrategy BI.
- Used Kubeflow to automate ML workflow for potential flaw detection in version releases.

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 custom model was optimized for real time detection with a mean Average Precision (mAP) score 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 webscraping.
- Pre-processed data and generated visualizations for further analysis.
- Discovered cross-linking relationships between features that help predict the shifting landscape for organizations.

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
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

EXTRA CURRICULARS

UofT Machine Intelligence Student Team Toronto, CA
Co-President July 2021 - Present

- 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.

- 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

E-Motion *Python, OpenCV, Selenium* <https://tinyurl.com/cyhtt8jr>
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.

Drowsy Driver Detector *Python, OpenCV, Face Detection* <https://tinyurl.com/rdjd57hh>
The program uses an eye detection to alert the driver if they are drowsy thereby preventing fatal crashes.

Personal Website *HTML5, CSS3, Javascript* <https://pandiah5.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 control. Feb 2021

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. Sept 2020

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. Feb 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