

Dhrumil Patel

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EXPERIENCE

Ramp

Software Engineer Intern

May - Aug 2024

New York City, US

- Built the international bill payment integration for 2 accounting platforms, deployed to **2600+** businesses
- Migrated accounting validation functions to run in bulk, improving their **p95 execution time** by **5x**
- Built a chatbot to search **500k+** leads' websites; won the company hackathon and deployed the project

Snowflake

Software Engineer Intern

Sept - Dec 2023

San Mateo, US

- Built clustering functions for Snowflake SQL to cluster **500k rows x 1k features** in **< 10 mins** with metrics
- Developed a novel algorithm to find the number of clusters in large datasets in **linearithmic** time

Roblox

Software Engineer Intern

May - Aug 2023

San Mateo, US

- Built QA's **first** observability tools to calculate release metrics and report anomalies. Used by **4 teams**

Vector Institute

Applied Machine Learning Research Intern

Sept - Dec 2022

Toronto, CA

- Used domain adaptation to improve privacy-preserving federated learning **CNNs'** performance by **3.2%**

A Thinking Ape

Software Engineer Intern

May - Aug 2022

Vancouver, CA

- Implemented **2-step authentication** using **Django**, **Objective C** and **Java** to eliminate **10k+** bots per day

Flinks

Machine Learning Intern

Jun 2021 - May 2022

Montreal, CA

- Built & deployed a **BERT**-driven entity recognition system in **PyTorch** to interpret **100M+** transactions per day
- Improved the existing entity recognition system's performance (F-score) by **56%**
- Used **Knowledge Distillation** to reduce required training data for entity recognition models by **30%**

PROJECTS & ORGANIZATIONS

Haystackfs

May 2021 - Present

- A verified Discord bot for fast and secure file search used by **42k+ users** in **650+ servers** to manage **1M+ files**

Unsupervised Monocular Depth Estimation

2023

- Extends Godard, Aodha, Brostow's 2016 work with a CNN for semantic segmentation

Watolink

Oct 2019 - Dec 2022

- Led a team of 10 to build an **EEG signal processing API** for a **mind-controlled communication system**

Google Code-In: CCExtractor

Oct 2019 - Feb 2020

- Built a **Python Github App** that has reported **1500+** unsupported songs for **CCExtractor** and **SwagLyrics**

AWARDS & ACCOMPLISHMENTS

1st at the International NeurotechX Competition

2022

HackMIT thatGameCompany Challenge 2nd Place, HackMIT MIT-IBM Challenge Winner

2022, 2020

Top 3% Globally, 7th in Canada at Google Hashcode Qualifying Round

2022

Top 7.5% Globally in Facebook HackerCup

2021

Hack The North Manulife Challenge Winner; Various prizes at 40+ hackathons

2017 - Present

EDUCATION

University of Waterloo, Candidate for Bachelor of Computer Science, Honours

President's Scholarship of Distinction, Faculty GPA: 3.9

TECHNICAL SKILLS

Languages: Python, C++, SQL, Java, Objective C

Tech: BigQuery, Google Cloud Platform, Docker, ElasticSearch, Spark, DigitalOcean, PostgreSQL

Libraries: PyTorch, Huggingface, OpenCV, scikit-learn, NumPy, SciPy, Tensorflow, Keras, Pandas, Matplotlib