# Harshit Agrawal

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## **EDUCATION**

## NIT, TRICHY - B.TECH

MAJOR IN COMPUTER SCIENCE

MINOR IN ECONOMICS May 2022 | Trichy, India

CGPA: 9.52/10.00 (Bronze Medallist)

#### K D AMBANI VIDYAMANDIR

Grad. May 2018 | Jamnagar, India

Class 12: 94.8 % Class 10: 10 CGPA

## LINKS

GitHub: @HarshitCodex LinkedIn: @HarshitAgrawal Codechef: @codexharsh Codeforces: @codexharsh Hackerrank: @HELICpros

## **PUBLICATION**

#### ICICC-NOVEMBER, 2021

K-Weighted Cluster Head Selection in Wireless Sensor Networks

## **COURSEWORK**

#### **UNDERGRADUATE**

Theory of Computation
Database Management Systems
Probability & Graph Theory
Algorithms & Data Structures
Operating Systems
Computer Networks
Android AppDev
Deep Learning
Cryptography
Machine Learning

#### **CERTIFICATIONS | ONLINE**

Machine Learning
Deep Learning Specialization

#### SKILLS

### PROGRAMMING LANGUAGES

- Java C++ Python C C#
- Javascript Kotlin

#### **FAMILIAR TOOLS & TECH**

- •BigQuery •Spanner •Flume •Guice
- •gRPC •SQL •.NET •REST APIs
- React Android Dev FullStack Dev
- •ML •Matlab •Keras •Pytorch •Scikit
- Git Scripts

#### **LANGUAGES**

• English • Hindi

## **EXPERIENCE**

#### GOOGLE INDIA | WORKSPACE PLATFORM | SWE | III | L4

July 2022 - Present | Bangalore, India

- Working with the **Business Insights Platform** team to provide fast and accurate metrics of workspace applications to customers through Admin Console.
- Created a new infrastructure for scheduling and computing 35+ metrics for 400K+ customers and serving them on the UI with <150ms P90 latency over a 12PB+ storage system on BigQuery.
- Improved the serving time by **75%** and reduced duplicate logs by **>99.5%** along with delivering resource savings of **>1.5 SWE years** with the new infrastructure design.
- Improve sign-in logs discoverability and robustness by implementing infrastructure for additional **30+ sign-in types** to be served to customers across multiple endpoints.
- Designed highly parallel large scale data processing flumes to efficiently read and perform data integrity validations and data comparisons across 5000+ BigQuery tables having Petabyte storage.
- Integrated compliant and automated resource scaling service in >35 servers.

## **URVAR** | SWE INTERNSHIP | STARTUP

September 2021 - March 2022 | Remote

- Worked on a marketplace cum social media Android app with 10k early users.
- Created **Jetpack Compose** based frontend using **Kotlin** and used **Golang** based backend server infratructure hosted on **AWS**.
- Contributed to data collection using **Python web scraping** and coordinated with the team for product development and discussions with go-to-market strategy.

#### SAMSUNG PRISM | ML INTERNSHIP

August 2019 - May 2022 | NIT Trichy, India

- Worked on **Hierarchical Topic labeling** by Active learning to create fine grained multi-label app classification over **5 levels** for **>70K** playstore apps.
- Used various ML techniques like **BERT** for topic modeling, **LDA** for finding right topics.

#### MICROSOFT INDIA (R&D) | SWE INTERNSHIP

June 2021 - July 2021 | Noida, India

- Created an **automated interface** for identifying and assigning builds to deployment rings by following policy frameworks in **Special Clouds Team**.
- Evaluated the use of **Azure cloud ecosystem** using PowerShell and Azure CLI for containerised systems with a small overview of **Docker** and **Kubernetes**.

## **PROJECTS**

# PROJECT EEVEE | Al Hack | Al Filters for Log Search

August 2023

- Developed an **Al-powered** smart event log search feature for Admin Console, utilizing an **LLM** to enhance event log filtering.
- Engineered a full-stack solution to seamlessly integrate the LLM model.
- Designed and implemented the AI model to translate **natural language user queries** into structured protos, dynamically populating search filters.
- Adjudged as winner out of 40+ projects presented in the hackathon.

# MULTILINGUAL SENTIMENT ANALYSIS | Thesis: FYP | NLP PROJECT

December 2021 - May 2022

- Worked on improving multilingual sentiment analysis for Indian Languages.
- Used BERT, LSTM and n-gram models to compare the results.
- Created word embeddings using pretrained embedding models like fastText.

#### **AWARDS**

Google	Spot Recognition	7 Times
Google	Peer Recognition	8 Times

Al Hack - Google WINNER LLM Filter Generator for Search

NIT Trichy Gold Medal (2019) SJ Chainulu Excellence Award (Rank 1 Acad)