

# Harshit Agrawal

[harshit.agrawal.work@gmail.com](mailto:harshit.agrawal.work@gmail.com) | [harshitcodex.github.io](https://github.com/harshitcodex) | [LinkedIn](#) | Bangalore, India | +91 7016004637

## 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](#)

[React: Creating and Hosting a Fullstack Site](#)

## 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

## AWARDS

Google Spot Recognition

13 Times

Google Peer Recognition

17 Times

AI Hack - Google WINNER

LLM Filter Generator for Search

NIT Trichy Gold Medal (2019)

SJ Chainulu Excellence Award (Rank 1 Acad)

## 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, API endpoints and BigQuery Export.
- Leading a **3 person team** for creating the data serving infrastructure and database schema creation of **200K/day** additional logs streamed into the system.
- 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 **20PB+ storage** system on **BigQuery**.
- Improved the serving time by **75%** and reduced duplicate logs by **>99.5%** along with delivering resource savings of **>\$25M** with the new infrastructure.
- Improved **sign-in logs** discoverability and robustness by implementing infrastructure for additional **30+ sign-in types** to be served to customers across multiple endpoints.
- Designed and implemented highly parallel **large scale data processing flumes** to efficiently read and perform **data integrity** validations and data comparisons across **5000+ BigQuery tables** having **12+ 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 infrastructure 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 | [AI Hack](#) | AI FILTERS FOR LOG SEARCH

August 2023

- Developed an **AI-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**.