Dec 2024 - Present

CONTACT

WORK EXPERIENCE



Google DeepMind, India | Onsite

Languages - C++, Python

Senior Software Engineer (L5) - Machine Learning | Gemini Global Team

Tools – Bazel, gRPC, JJ, other Google internal tools

- Driving development of key Gemini features, from agentic systems and i18n to student tools.

- Shipped high-quality Workspace integrations for i18n users by upgrading to new internal frameworks.
- Owned the backend internationalization for Scheduled Actions e, enabling its successful global launch.
- Spearheading a new student-focused agentic feature, owning the full lifecycle with FE, UX, PM, etc.



Samsung Electronics (HQ), South Korea | Onsite

Oct 2020 - Nov 2024

Software Engineer - Backend & Infrastructure | Al Team, Mobile Division

Languages – Java, Kotlin | Tools – Spring Boot, Gradle, Docker, K8s, LLM

- Engineered backend services at the intersection of Bixby (AI) and SmartThings (IoT) clouds.
- Led the end-to-end integration of LLMs into Bixby, enabling complex, natural language device control. Architected a new device search & execution microservice during a cloud migration, introducing fuzzy and advanced search capabilities to improve device discovery.
- Developed a recommendation engine using graph databases to deliver personalized user experiences.
- Received top performance rating ('Exceeds Most'), awarded to <10% of employees (2021, 2023).
- Initiated and led official study groups to mentor new employees on Software Engineering & Data Science.
- Achieved advanced certifications (NLP, CV, Data Science) with US \$10,000 in certification bonuses.

## **EDUCATION**



Indian Institute of Technology (IIT) Bombay, India | Onsite B.Tech. in Computer Science and Engineering | CGPA: 9.13 / 10

Aug 2016 — Nov 2019 (Early Graduate)

India

Competitive Programming — C++ | Machine / Deep Learning — Python, NumPy, PyTorch

- India's most reputed and competitive university in STEM. Ranked 118 in QS World University Rankings
- Project: Human Pose Estimation using anchor-pose approaches to FAIR's Detectron with Prof. Arjun Jain
- Student Instructor in CS-152: Abstractions and Paradigms course with Prof. Sanyal in Spring 2018
- 10/10 in programming component of all computer science courses I had taken during my entire study
- 10/10 in Advanced Machine Learning, Deep Learning, Computer Vision, Linear Algebra, etc...

## SELECT PROJECTS

**Digital Garden** 

✓ My writings on technology, software engineering and programming

Screen Translator (88★) 

✓ Android App built with Kotlin, Jetpack tools and Compose UI

2020-now
2022-2024

Reinforcement Learning & - UCB, KL-UCB, Thompson Sampling. Howard's Policy Iteration for MDP

Al & Machine Learning & - ConvNets, SVM, K-means, Ensembles, Learning Agents, A\* search etc.

pix2pix: Image-to-Image Translation & - paper by Phillip Isola et al. implemented using PyTorch

Compilers & - Scanner, parser and a semantic analyzer for a subset of C language using Flex, Bison

Database Systems & - SQL queries, schema design for mobile/web apps, use of connectors (JDBC)

Computer Networks & - Implemented Spanning Tree Protocol, SimpleFTP using sockets etc.

Computer Graphics & - A tiny music-box animation rendered and created wholly using OpenGL

Eclipse OJ & - First experience on development of full-stack Django web application and UI

## COMPETITIVE PROGRAMMING

Rank 27 - 2020 Amritapuri (Online) Rank 11 - 2020 Kharagpur (Online) **■ICPC** Rank 70 - 2019 Amritapuri | Rank 36 - 2018 Amritapuri | Rank 18 - 2018 Chennai Google Codejam 2022 Round 1C - Rank 603 Google Foobar Finished all 5 levels in 2018 2022 Round A - Rank 155 2020 Round F - Rank 386 2022 Round C - Rank 62 Google Kickstart 2021 Round H - Rank 2021 Round G - Rank 83 2019 Round G - Rank 159 2019 Round F - Rank 79 2019 Round E - Rank 75 | 2018 Round A - Rank 151 Meta HackerCup 2023 Round 1 - Rank 467 2022 Round 2 - Rank 1232 | 2021 Round 2 - Rank 1690 2019 Round 2 - Rank 836 | 2018 Round 2 - Rank 967

2019 Round 2 - Rank 836 | 2018 Round 2 - Rank 967

Project Euler 

Rank 2430 (top 0.18%), by solving 232 challenging mathematics + algorithm problems

Codeforces ≈ Rating 2053 max. (Candidate Master) — Best ranks include 16, 77, 81 in Div 2 contests

Codechef ≈ Rank 988 (Global) - Best contest rankings include World Rank 8, 15, 19, 20, 34, 41, 55

SnackDown 2021 Round 1A - Rank 63 | DS & Algorithms (Advanced) Certified 2020

## **ACHIEVEMENTS**

IIT-JEE Advanced Rank 20 across all of India among 1.2 million examinees for admission into IITs 2016 2016 **NEST** Rank 2 across all of India, the test for science university admissions (IISERs) **AP-EAMCET** Rank 1, the test for university admissions by Govt. of Andhra Pradesh, India 2016 **TS-EAMCET** Rank 10, the test for university admissions by Govt. of Telangana, India 2016 Rank 26 by DST, Ministry of Science and Technology, Govt. of India **KVPY Fellowship** 2014 Rank 158 with monetary benefit by Ministry of Education, Govt. of India NTSE Scholarship 2012

LANGUAGES Trilingual — తెలుగు, English, हिन्दी | Beginner — 한국어 TOPIK Level 2 (191/200) @ CITIZENSHIP