**CONTACT** 

### WORK EXPERIENCE

Samsung Electronics (HQ), South Korea (Onsite)
Software Engineer | Artificial Intelligence (AI) Team, Mobile Division

Oct 2020 — Present

Languages — Java, Kotlin | Tools — Spring Boot, Gradle, Docker, Kubernetes, LLMs

- Working at the intersection of Bixby (Al cloud) and SmartThings (IoT cloud) to control IoT devices via voice.
- Received 'Exceeds Most' 100% grade in 2021 and 2023 review limited to less than 10% of employees.
- Currently working on LLM integration into Bixby to control smart IoT devices in SmartThings with LLM.
- Leading the work on search and execution of the right devices from user's command through SmartThings.
- Collaborated with overseas dev teams efficiently through business travels for design decisions and plans.
- Experience with handling code involving new features, unit tests, bug fixes, deployments, *etc.*, with broad experience in complete lifecycle of backend services from ideation to deployment.
- Cleared both NLP and Computer Vision (Advanced) within Samsung's internal AI certification program.
- Achieved S/W Professional and Data Science II internal certifications with monetary benefit of US \$8600
- Organized official study groups to mentor new employees on Software Engineering and Data Science.
- Was a developer for the Bixby Home Platform & primarily involved with the backend services.
- Refactored new device-search microservice from existing services on Bixby Home Platform during internal cloud migration. Developed new features supporting fuzzy & advanced search after migration.
- Worked on new recommendation features together with the product team. Developed new microservices using graph databases to support the new personalized recommendations for users in Bixby.

#### **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)

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
- Teaching Assistant (TA) 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, guides and programming

Screen Translator (56★) 

Android App built with Kotlin, Jetpack tools and Compose UI

Project ZEN 

Collection of my algorithm implementations in C++ for coding competitions

2024 ~

2022-2023

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

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# COMPETITIVE PROGRAMMING

ICPC 2		Online)   Rank 1	91 , ,
ipo mente i CFC 6	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
Google Kickstart		2022 Round A - Rank 155	
	2021 Round G - Rank 83	2020 Round F - Rank 386	2019 Round G - Rank 159
	2019 Round F - Rank 79	2019 Round E - Rank	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	
Project Euler <b></b>	Rank 2237 (top 0.2%), by so	lving 225 challenging mathem	natics + algorithm problems
Cadafayaaa	Dating 2052 may (Candidate	- Mastari Post replicingly	- 1/ 77 01 in Div 2

Codeforces of Codechef

Rating 2053 max. (Candidate Master) — Best ranks include 16, 77, 81 in Div 2 contests 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
NEST	Rank 2 across all of India, the test for science university admissions (IISERs)	2016
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
KVPY Fellowship	Rank 26 by DST, Ministry of Science and Technology, Govt. of India	2014
NTSE Scholarship	Rank 158 with monetary benefit by Ministry of Education, Govt. of India	2012