**CONTACT** 

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# Work **EXPERIENCE**

Samsung Electronics (HQ), South Korea (Onsite)

Oct 2020 - Present

Software Engineer | Artificial Intelligence (AI) Team, Mobile Division

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 OS 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**

2024 ~ Screen Translator (56★) & Android App built with Kotlin, Jetpack tools and Compose UI 2022-2023 **Project ZEN** & Collection of my algorithm implementations in C++ for coding competitions 2020-2023

Reinforcement Learning & - UCB, KL-UCB, Thompson Sampling. Howard's Policy Iteration for MDP 2019 Al & Machine Learning & - ConvNets, SVM, K-means, Ensembles, Learning Agents, A\* search etc. 2019 pix2pix: Image-to-Image Translation & - paper by Phillip Isola et al. implemented using PyTorch 2019 Compilers & - Scanner, parser and a semantic analyzer for a subset of C language using Flex, Bison 2019 Database Systems & - SQL queries, schema design for mobile/web apps, use of connectors (JDBC) 2018 Computer Networks & - Implemented Spanning Tree Protocol, SimpleFTP using sockets etc. 2018 Computer Graphics & - A tiny music-box animation rendered and created wholly using OpenGL 2018 Eclipse OJ @ - First experience on development of full-stack Django web application and UI 2017

# COMPETITIVE **PROGRAMMING**

Rank 27 - 2020 Amritapuri (Online) **■** ICPC ☑ Google Codejam ≥ 2022 Round 1C - Rank 603

Rank 11 - 2020 Kharagpur (Online) Rank 70 - 2019 Amritapuri | Rank 36 - 2018 Amritapuri | Rank 18 - 2018 Chennai

Google Foobar Finished all 5 levels in 2018 Google Kickstart & 2022 Round C - Rank 62 | 2022 Round A - Rank 155 2021 Round H - Rank 57 2021 Round G - Rank 83 | 2019 Round F - Rank 79 | 2020 Round F - Rank 386 2019 Round G - Rank 159 2018 Round A - Rank 151 2019 Round E - Rank 75 Meta HackerCup & 2023 Round 1 - Rank 467 | 2022 Round 2 - Rank 1232 | 2021 Round 2 - Rank 1690

Project Euler ≥ Codeforces ≥ 

2019 Round 2 - Rank 836 | 2018 Round 2 - Rank 967 Rank 2237 (top 0.2%), by solving 225 challenging mathematics + algorithm problems 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

Trilingual — 憂めが、English、 हिन्दी | Beginner — 한국어 TOPIK Level 2 (191/200) ය

**CITIZENSHIP** 

India