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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 (AI 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)** Aug 2016 – Nov 2019
B.Tech. in Computer Science and Engineering | CGPA: 9.13 / 10 (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 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
AI & 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  **ICPC** Rank 27 - 2020 Amritapuri (Online) | Rank 11 - 2020 Kharagpur (Online)
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 C - Rank 62 | 2022 Round A - Rank 155 | 2021 Round H - Rank 57
2021 Round G - Rank 83 | 2020 Round F - Rank 386 | 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
Project Euler Rank 2237 (top 0.2%), by solving 225 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
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

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