


# SATTI VAMSI KRISHNA REDDY


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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 (50★)** - 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 2258 (top 0.21%), by solving 219 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