SATTI VAMSI KRISHNA REDDY

CONTACT

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WORK EXPERIENCE

Google DeepMind, India | *Onsite*   *Dec 2024 — Present*
Senior Software Engineer – Machine Learning (L5) | *Gemini Global Team*

Samsung Electronics (HQ), South Korea | *Onsite*   *Oct 2020 — Nov 2024*
Software Engineer – Backend & Infrastructure | *AI Team, Mobile Division*

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

- 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 (75★) ↗   Android App built with Kotlin, Jetpack tools and Compose UI   *2022-2024*
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