VAMSI KRISHNA REDDY SATTI

CONTACT

Email: vamsi3@outlook.com ↗ | Gmail: vamsi2519915@gmail.com ↗ | Website: vamsi3.github.io ↗
Current Residence: Suwon-si, Gyeonggi-do, South Korea ↗ | LinkedIn: vamsi3 ↗ | GitHub: vamsi3 ↗

WORK EXPERIENCE

SAMSUNG **Samsung Electronics (HQ), South Korea** *(Onsite)* — Oct 2020 — Present
Software Engineer | *Artificial Intelligence (AI) Team, Mobile Division*

Language — Java, Kotlin | Tools — Spring, Mockito, CI/CD, Docker, Kubernetes, LLMs

- Working at the intersection of Bixby (AI cloud) and SmartThings (IoT cloud) to control IoT devices *via* voice.
- Experience with handling large code involving new features, unit tests, bug fixes, deployments, *etc.*, with broad experience in complete lifecycle of projects with backend services from ideation to deployment.
- Worked on a microservice to search and execute devices through SmartThings from user's IoT utterance.

- Developer for the Bixby Home Platform ↗ - primarily involved with the backend code and infrastructure.
- 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.

- Working on new recommendation features together with the product team. Developing new microservices with graph databases to support the new personalized recommendations for users in Bixby.
- Developer for LLM integration into Bixby, part of a core team working on IoT device control with LLM.

- Received EX (Excellent - 100%) grade in 2022,24 annual reviews, limited to less than 10% of employees.
- Cleared both NLP and Computer Vision (Advanced) within Samsung's internal AI certification program.
- Achieved S/W Professional Level and Data Science Level 2 internal certifications with monetary benefit.
- Organized official study groups to mentor new employees on Software Engineering and Data Science.

Samsung Electronics (HQ), South Korea *(Onsite)* | *Software Engineer Intern* — May 2019 — Jul 2019
Ubisoft Entertainment, India *(Onsite)* | *Game Developer Intern* — May 2018 — Jul 2018

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 for STEM, and especially Computer Science.
- Teaching Assistant (TA) in CS-152: Abstractions and Paradigms course with Prof. Sanyal in Spring 2018.
- Project: Human Pose Estimation using anchor-pose approaches to FAIR's Detectron with Prof. Arjun Jain
- 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, Computer Logic

SELECT PROJECTS

Screen Translator (36★) ↗ Android App built with Kotlin, modern Jetpack tools and Compose UI ~ *active*
Algorithm Library ↗ Collection of my algorithm implementations in Kotlin for coding competitions ~ *active*
Project ZEN ↗ My website of knowledge across software development (auto-deployed with CI/CD) ~ *active*

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