Dec 2024 — Present

CONTACT

Email: vamsi3@outlook.com Website: vamsi3.github.io LinkedIn: vamsi3 Gmail: vamsi2519915@gmail.com Residence: Bengaluru, India GitHub: vamsi3

Work **EXPERIENCE**



Google DeepMind, India Onsite

Languages - C++, Python

Senior Software Engineer (L5) - Machine Learning | Gemini Global Team

Tools - Bazel, gRPC, JJ, other Google internal tools

- Driving development of key Gemini features, from agentic systems and i18n to student tools.
- Shipped high-quality Workspace integrations for i18n users by upgrading to new internal frameworks.
- Owned the backend internationalization for Scheduled Actions e, enabling its successful global launch.
- Spearheading a new student-focused agentic feature, owning the full lifecycle with FE, UX, PM, etc.

Samsung Electronics (HQ), South Korea | Onsite

Oct 2020 - Nov 2024

Software Engineer - Backend & Infrastructure | Al Team, Mobile Division

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

- Engineered backend services at the intersection of Bixby (AI) and SmartThings (IoT) clouds.
- Led the end-to-end integration of LLMs into Bixby, enabling complex, natural language device control.
- Architected a new device search & execution microservice during a cloud migration, introducing fuzzy and advanced search capabilities to improve device discovery.
- Developed a recommendation engine using graph databases to deliver personalized user experiences.
- Received top performance rating ('Exceeds Most'), awarded to <10% of employees (2021, 2023).
- Initiated and led official study groups to mentor new employees on Software Engineering & Data Science.
- Achieved advanced certifications (NLP, CV, Data Science) with US \$10,000 in certification bonuses.

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 QS World University Rankings
- Project: Human Pose Estimation using anchor-pose approaches to FAIR's Detectron with Prof. Arjun Jain
- Student Instructor 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 and programming 2020-now Screen Translator (88★)

Android App built with Kotlin, Jetpack tools and Compose UI 2022-2024

Reinforcement Learning *a* - UCB, KL-UCB, Thompson Sampling. Howard's Policy Iteration for MDP 2019 AI & Machine Learning *a* - ConvNets, SVM, K-means, Ensembles, Learning Agents, A* search *etc.* 2019 pix2pix: Image-to-Image Translation a - paper by Phillip Isola et al. implemented using PyTorch 2019 Compilers a - 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 - 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) Rank 11 - 2020 Kharagpur (Online) ICPC 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 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 Meta HackerCup

Rank 2430 (top 0.18%), by solving 232 challenging mathematics + algorithm problems **Project Euler** 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 Rank 2 across all of India, the test for science university admissions (IISERs) 2016 **NEST 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 — తెలుగు, English, हिन्दी | Beginner — 한국어 TOPIK Level 2 (191/200) **LANGUAGES CITIZENSHIP**

India