VAMSI KRISHNA REDDY SATTI

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WORK EXPERIENCES

Samsung Electronics (HQ), South Korea Oct 2020 – Present
Mobile eXperience (MX) Division - Artificial Intelligence (AI) Team *(Software Engineer)*

Language – Java, Kotlin | Tools – Spring, Mockito, GitHub Actions, Docker, Kubernetes

- Working at the intersection of Bixby (AI cloud) and SmartThings (IoT cloud) to control IoT devices *via* voice.
- Involves development of microservice to search and execute target devices from NLP-tagged voice query.
- Experience with handling large code involving new features, unit tests, bug fixes, deployments *etc*.

- Received EX (Excellent - 100%) grade in 2022 annual work review, limited to less than 10% of employees.
- Cleared AI Academy's Computer Vision (Advanced), within Samsung's internal AI certification program
- Achieved S/W Professional Level internal coding certification and received additional monetary benefit.

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

EDUCATION

Indian Institute of Technology (IIT) Bombay 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

- 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

Andhra Pradesh Board of Intermediate Education | Percentage: 98.2% Jun 2014 - Mar 2016
Central Board of Secondary Education | CGPA: 10/10 Jun 2012 - Mar 2014

GITHUB REPOSITORIES

Algorithm Library ⬈ Collection of my algorithm implementations in Kotlin for coding competitions ~ *active*
Screen Translator ⬈ Android App built on Kotlin and modern Jetpack tools including Compose UI ~ *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
Railway Signal Controller ⬈ - First experience with hardware languages (VHDL) over FPGA board 2018
Image Quilting: Texture Synthesis ⬈ - paper by Alexei A. Efros *et al.* implemented using MATLAB 2018
Image Processing & Editing Tool ⬈ - Spatial image processing like blur, histogram equalization *etc*. 2017
Eclipse OJ ⬈ - First experience on development of full-stack Django web application and UI 2017
Othello Game ⬈ - First experience on rapid development using docs of a new *lisp-like* language 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
FB Hacker Cup ⬈ 2021 Round 1 - Rank 700 | 2019 Round 2 - Rank 836 | 2018 Round 2 - Rank 967
Project Euler ⬈ Rank 2248 (top 0.21%), by solving 213 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, Government of India 2014
NTSE Scholarship Rank 158, by NCERT, Ministry of Education, Government of India 2012

LANGUAGES

Trilingual – తెలుగు, English, हिन्दी | **Beginner** – 한국어 *TOPIK Level 2* ($^{191}/_{200}$) ⬈ **CITIZENSHIP** India