




VAMSI KRISHNA REDDY SATTI

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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 EXPERIENCES	 Samsung Electronics (HQ), South Korea (Onsite) <i>Mobile eXperience (MX) Division - Artificial Intelligence (AI) Team</i> 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 <i>via</i> 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 <i>etc.</i> with broad experience on complete lifecycle of projects with backend services from ideation to deployment. - Developer for the Bixby Home Platform - primarily involved with the backend code and infrastructure. - Lead developer for device-search microservice on Bixby Home Platform, with fuzzy & advanced search. - Core developer on new <i>upcoming</i> features with work on backend microservices with graph databases. - Received <u>EX (Excellent - 100%)</u> grade in 2022 annual work review, limited to less than 10% of employees. - Cleared both NLP and Computer Vision (Advanced) within Samsung's internal AI certification program. - Achieved <u>S/W Professional Level</u> and <u>Data Science Level 2</u> internal certifications with monetary benefit.	Oct 2020 — Present (Software Engineer)	
	Samsung Electronics (HQ), South Korea (Onsite) <i>Software Engineer Intern</i> May 2019 — Jul 2019 Ubisoft Entertainment, India (Onsite) <i>Game Developer Intern</i> May 2018 — Jul 2018		
EDUCATION	 Indian Institute of Technology (IIT) Bombay, India (Onsite) <i>B.Tech. in Computer Science and Engineering</i> CGPA: 9.13 / 10 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 - <u>10/10</u> in programming component of all Computer Science courses I had taken during my entire study. - <u>10/10</u> in Advanced Machine Learning, Deep Learning, Computer Vision, Linear Algebra, Computer Logic	Aug 2016 — Nov 2019 (Early Graduate)	
GITHUB REPOSITORIES	Screen Translator (32★) - Android App built with Kotlin, modern Jetpack tools and Compose UI ~ <i>active</i> Algorithm Library - Collection of my algorithm implementations in Kotlin for coding competitions ~ <i>active</i> Project ZEN - My website of knowledge across software development (auto-deployed with CI/CD) ~ <i>active</i> 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 <i>etc.</i> 2019 pix2pix: Image-to-Image Translation - paper by Phillip Isola <i>et al.</i> 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 <i>etc.</i> 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 <i>et al.</i> implemented using MATLAB 2018 Image Processing & Editing Tool - Spatial image processing like blur, histogram equalization <i>etc.</i> 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 <i>lisp-like</i> 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 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 2266 (top 0.21%), by solving 219 challenging mathematics + algorithm problems Codeforces Rating 2053 <i>max.</i> (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		