# VAMSI KRISHNA REDDY SATTI

**CONTACT**
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**WORK**

**Samsung Electronics, South Korea (HQ)**                                          Oct 2020 – Present
*Mobile Communications Division* | Software Engineer
   Language – <u>Java</u> | Framework – Spring Boot, Mockito | Cloud – AWS, 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 appropriate devices from voice commands.
- Achieved <u>S/W Professional Level</u> internal coding certification and received additional monetary benefit.
- Experience with handling large code (4+ years old) including <u>new features, unit tests, bug fixes</u>, making deployments using pipelines, monitoring health and a primary programmer for the current major <u>refactor</u>.

**Samsung Electronics, South Korea (HQ)** | *Software Engineer Intern*          May 2019 – Jul 2019
- Worked on improvements to automations in SmartThings. Received a <u>job offer</u> in recognition of my work.

**Ubisoft, India** | *Game Developer Intern*                                           May 2018 – Jul 2018
- Integrated ad SDKs into a game in both Android, iOS. Improved save progress feature in server (Node.js).

**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 – <u>C++</u> | Machine / Deep Learning – <u>Python</u>, NumPy, PyTorch
- <u>Teaching Assistant (TA)</u> in CS-152: Abstractions and Paradigms course with Prof. Sanyal in Spring 2018.
- Bachelor's Project: "Towards Single-Shot Multi-Person 3D Human Pose Estimation" with Prof. Arjun Jain and Prof. Ganesh on anchor-pose approaches to SSD using Facebook AI's maskrcnn-benchmark repository.
- <u>10/10</u> in AI & Machine Learning, Advanced Machine Learning, Deep Learning, Computer Vision, Linear Algebra, Logic in Computer Science + Programming component of all Computer Science courses I had taken.

**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

**COMPETITIVE CODING**

**ICPC**  Rank 27 - 2020 Asia Amritapuri (Online) | Rank 11 - 2020 Asia Kharagpur (Online)
         Rank 70 - 2019 Asia Amritapuri | Rank 18 - 2018 Asia Chennai | Rank 36 - 2018 Asia Amritapuri

**FB Hacker Cup**  2021 Round 1 - Rank 700 | 2019 Round 2 - Rank 836 | 2018 Round 2 - Rank 967

**Google Codejam**  2021 Round 1A - Rank 884          **Google Foobar**  Finished all 5 levels in 2018
**Google Kickstart**  2021 Round G - Rank  84 | 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

**Project Euler**  Rank 2229 (top 0.21%), by solving <u>210</u> challenging mathematics + algorithm problems
**Codeforces**  Rating 2053 *max.* (<u>Candidate Master</u>) – Best ranks include 16, 77, 81 in Div 2 contests
**Codechef**  <u>Rank 974</u> (Global) - Best ranks include 8, 15, 19, 20, 34, 41, 55, 90 in Long Challenges. Qualified their Data Structures and Algorithms Certification (Advanced Level) in 2020.

**Project ZEN**  My reference website of self-written codes since graduation (2020 – Present) related to Competitive Programming and also includes Deep Learning, Image Processing, *etc*.

**ML + IMAGE PROCESSING**

**CS-335: AI & Machine Learning** *(in Python + NumPy)*                                      2019
Implemented Feed-Forward + Convolutional Neural Nets, Ridge and Lasso regression, K-means clustering, Ensemble methods (Bagging + AdaBoost), Agents (Value / Policy Iteration), Minimax algorithm + A* search

**pix2pix: Image-to-Image Translation** - by Phillip Isola *et al.* implemented using PyTorch          2019
**Image Quilting: Texture Synthesis and Transfer** - by Alexei A. Efros *et al.* using MATLAB          2018
**Simple GAN** - Generative Adversarial Neural Network (GAN) on MNIST dataset using PyTorch          2018
**Image Processing & Editing Tool** - Spatial image processing like blur, histogram equalization *etc.*          2017

**HONORS**

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| **IIT-JEE Advanced** | <u>Rank 20</u> across all of India, the test for admission into prestigious IITs in India | 2016 |
| **NEST** | <u>Rank 2</u> across all of India, the test for science university admissions (IISERs) | 2016 |
| **AP-EAMCET** | <u>Rank 1</u>, the test for university admissions by Govt. of Andhra Pradesh, India | 2016 |
| **TS-EAMCET** | <u>Rank 10</u>, the test for university admissions by Govt. of Telangana, India | 2016 |
| **KVPY Fellowship** | <u>Rank 26</u>, by Department of Science and Technology, Govt. of India | 2014 |
| **NTSE Scholarship** | <u>Rank 158</u>, by Ministry of Human Resource Development, Govt. of India | 2012 |

**LANGUAGES**  **Native** – Telugu | **Fluent** – English, Hindi | **Basic** – Korean          **CITIZENSHIP**  India