

SARTHAK SRIVASTAVA

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EDUCATION

Netaji Subhas Institute of Technology, University of Delhi

(Aug 2015 - May 2019)

Bachelor of Engineering, Computer Engineering (78.80% - **1st class with Distinction**)

Awarded Merit Scholarship for being among the **top 10 students in the Computer Science Department**.

Delhi Public School Mathura Road, New Delhi

(Mar 2001 - Mar 2015)

Class 12 (96.80%)- Received 'Letter of Commendation' from **Ms Smriti Irani, Education Minister of India - Among top 1% in India**.

Class 10 (CGPA: 10.0/10.0) - Gold Medalist for **9 consecutive years** (Among the top 3 students in school)

WORK EXPERIENCE

Senior Data Engineer, Samsung R&D Bangalore - Internet of Things Department

(June 2019 - Present)

- Selected into the coveted Data Intelligence team under Smart Living, which provides AI based solutions for 'smart appliances' through the SmartThings App (with 500M+ downloads on Google Play).
- Smart Recommendation:** Developed a neural network model to provide a smart schedule depending on the past usage to lower power consumption and predict potential issues in the appliance with >80% accuracy.
- Diagnostics:** Received **Samsung Spot Award** for applying AutoML models on aggregated features to predict refrigerant leak issue in air conditioners, 30 days prior to it's occurrence with 91% precision.
- Platform:** Built a Data Catalog with AI-based lineage and data profiling features for enhanced data discovery and usage experience, **currently being used by IoT teams in India and Korea**. Got promoted to **Senior Data Engineer** within 2 years.
- Patent:** Led the IP (Intellectual Property) Taskforce and worked on patenting a solution for optimizing Robo Vacuum Cleaner functioning using UWB (ultra-wideband) sensors; the solution is currently under review at **Samsung Korea**.

Indian Institute of Sciences, Bangalore - Research Assistant

(Oct 2020 - Present)

- Worked under Dr. Sai Siva Gorthi on diagnosis of **Sickle Cell Disease(SCD)** which affects 6.4 million people across the globe.
- Developed an AutoML based technique to classify UV spectroscopy data for diagnosis of SCD with 100% sensitivity and 93.84% specificity. Resulting [paper](#) has been submitted to the **2022 IEEE International Symposium on Biomedical Imaging**.

Netaji Subhas Institute of Technology, Univ. of Delhi - Research Assistant

(Aug 2018 - May 2019)

- Formulated a temporal residual modeling technique which uses the difference between consecutive video frames to implement [Video Steganography](#) using Convolutional Neural Network.
- The model outperformed the Least Significant Bit model in terms of the Average pixel-wise discrepancy score by 42.77%.

Research and Development Intern, Samsung R&D Bangalore - 5G Networks

(May 2018 - July 2018)

- Improved data retrieval performance of Configuration Management System by 32% through machine learning models and received a 'Letter of Commendation' from the Director, Network department for exceptional performance.
- Awarded **Advanced Software Competency Certification** in first attempt (<2% of 400 interns) for formulating optimized code.

Zurich University of Applied Sciences - Research Assistant

(May 2017 - July 2017)

- Worked under Dr. Piyush Harsh in the Service Prototype Lab, which specializes in Cybersecurity and Cloud services.
- Implemented [Audio Steganography](#) using audio in a remote monitoring system by developing an optimised algorithm that produced better results than the LSB encoding method by 35% (in terms of Mean Square Error value).

AWARDS & HONORS

- Secured **AIR (All India Rank) - 157 in ACM-ICPC Regional round** (2017)
- Secured **AIR-3482 (among 1.3 million students)** in the Joint Entrance Exam(for Undergraduate admission)
- Secured **AIR-100** in National Science Olympiad (2012), **AIR-143** in National Cyber Olympiad (2011), **AIR-132** in International French Olympiad (2012), **AIR-179** in Unified Cyber Olympiad, **AIR-191** in International Math Olympiad (2012).
- 1st position in Delhi State School Chess Championship (2011, 2012, 2013) ([Certificates](#))

TECHNICAL PROJECTS & CERTIFICATIONS

- [Interactive Classroom](#) : Online classroom portal with academic resources and records.(Python, JavaScript, MongoDB)
- [Music Recommender](#) : Web app to recommend songs based on content using Deep Learning(Python, HTML,CSS, Jupyter)
- [Certifications](#) : Neural Network and Deep Learning, Face Recognition, Image Recognition, Programming in Java.