

# SATYAM KUMAR

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## EDUCATION

### INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, KALYANI

B.Tech in Computer Science and Engineering  
Expected June 2021 | CGPA - 9.13/10

### THE PENTECOSTAL ASSEMBLY SCHOOL

Bokaro Steel City, IN

STD 12TH Passed:2017 | 94.6 %

STD. 10TH Passed:2015 | CGPA:10/10

## LINKS

LinkedIn://satyamtg   GitHub://satyamtg  
GitLab://satyamtg   Twitter://@satyamtg  
Facebook://satyamtg   XDA://@satyamtg  
Telegram://satyamtg

## SKILLS

C++   JavaScript   Python   CSS/SCSS   Shell  
HTML   C   Arduino   PHP   Assembly   Java  
Android   Solidity   iOS   LATEX   MySQL NoSQL  
GraphQL   Image Processing   Deep Learning  
Machine Learning   NLP   Golang   Kubernetes

## COURSEWORK

- Programming in C/C++/Python/Java
- Compiler Design
- Computer Organization and Architecture
- Machine Learning and Artificial Intelligence
- Operating Systems
- Database Management Systems (SQL/NoSQL)
- Computer Vision and Image Processing
- Computer Networking
- Probability, Statistics, Calculus and Discrete Mathematics
- Graphics and Multimedia

## EXPERIENCE

### GOOGLE SUMMER OF CODE

STUDENT DEVELOPER AT KIWIX | JUN 2020 - PRESENT

- Helping archiving the internet with the ZIM spec by improving several of their python based scrapers (softwares to convert online content into ZIM files), and the Zim Farm, which is a semi-decentralized system to allow automated creation of ZIM files
- Major contributions to four of their projects, python\_scraperlib, sotoki, ted2zim and openedx2zim. python\_scraperlib would also be used by a Mozilla sponsored project.
- One among the 1199 people selected for this prestigious program with Google Open Source

### INVIGILO TECHNOLOGIES

COMPUTER VISION INTERN | FEB - MAR 2020

- Made custom models using deep CNNs for realtime multi-object segmentation for this NUS based startup

### GOOGLE CODE-IN

MENTOR FOR TENSORFLOW | DEC 2019 - JAN 2020

- Helped many students get started with AI, Machine Learning and Deep Learning using TensorFlow by Google. Served as a mentor at GCI 2019

### PERFECTICE

BACKEND DEVELOPER (INTERN) | AUG 2019 - OCT 2019

- Worked on an AI-based voice assistant that can query their private APIs securely and provide a new way for their customers to use their platform i.e. via voice

### ONIRIA CREATIONS

PYTHON DEVELOPER AND DATA SCIENTIST INTERN | JUNE 2019 - SEPT 2019

- Automated their data collection and lead generation system for the total sales and leads from within their website and worked on scripts to automate their workflow

### THE SPARKS FOUNDATION

INTERN | JUNE 2019 - JULY 2019

- Created APIs and cloud infrastructure
- Automated various aspects of the foundation using cloud computing and made a secure chatbot for them.

## AWARDS

2020	National	Winner of Smart India Hackathon 2020 Software under Problem Statement DR135 by Govt. of Goa
2019	National	"2nd Runner-up" in CodeUtsava 3.0 Hackathon at NIT Raipur
2018	National	"Most Innovative Hardware Hack" in HACKABIT 2018
2017	National	2nd rank in SOF National Cyber Olympiad (NCO) in India
2016	Zonal	2nd rank in finals of SOF National Cyber Olympiad in Jharkhand



# CERTIFICATIONS

## MACHINE LEARNING

COURSERA | SEP 2019 | 100% | STANFORD ONLINE

## IBM BLOCKCHAIN FOUNDATION AND USE CASES

COURSERA | JUNE 2019 | 100% | IBM

## BLOCKCHAIN: FOUNDATIONS AND USE CASES

COURSERA | JUNE 2019 | 97.8% | CONSENSYS ACADEMY

## NPTEL CERITIFICATIONS

DSA IN C | CLOUD COMPUTING | IoT

## SCALABLE MICROSERVICES WITH KUBERNETES

UDACITY

# PROJECTS

## R.A.H.G.I.R

LANDMARK IDENTIFICATION AND INFORMATION RETRIEVAL SYSTEM USING DEEP CONVOLUTIONAL NEURAL NETWORKS | JAN 2020 - AUG 2020

The prototype is a mobile app which identifies a landmark and tells information about it just by clicking its picture. This project solves the problem statement given out by Govt. of Goa in Smart India Hackathon 2020.

**READABILITY OF HINDI TEXT BASED ON SYNTACTIC ANALYSIS**  
NLP RESEARCH PROJECT UNDER DR. SANJAY CHATTERJI AT IIIT KALYANI | OCT 2019 - PRESENT

This project aims at finding the syntactic tree structures and relations that affect the readability of hindi news text.

## VRSCRIPT

A MODERN VR BASED 3D VISUAL PROGRAMMING LANGUAGE AIMED AT MAKING LEARNING FUN ANDSIMPLE | OCT 2019

This is a visual programming language (similar to scratch) but is VR enabled to make learning fun and give another degree of freedom. Aimed at kids between 8-12 years, this project uses A-Frame to make it accessible over Web VR. This was made at InOut, India’s largest community hackathon.

## HERETOHEAR

A DEPRESSION DETECTION AND CONTROL SYSTEM USING AI AND MACHINE LEARNING | JAN 2019

This project aims at detecting depression based on the utterances a person makes in his day to day life, can confirm it by doing a sentiment analysis of social media, and warn the near and dear ones. It also suggests the person as a psychiatrist and is packed as an Alexa Skill. It won the 2nd Runner-up at NIT Raipur’s CodeUtsava 3.0

## EYEAi

AI POWERED WEARABLE FOR THE VISUALLY IMPAIRED | MAR 2019

A project that converts everything that a normal person can see into an interactive audio experience. This deep learning powered wearable helps a visually impaired person by giving a brief summary of the environment around him/her and can also identify faces, objects etc.

# ACHIEVEMENTS

- Winner of Smart India Hackathon 2020
- Facebook PyTorch Scholarship Challenge 2019 recipient
- Bertelsmann scholarship recipient in the AI Track
- Shortlisted in top 250 teams in the Facebook Spark AR program
- Undergoing training to become a GitHub Campus Expert
- Part of the Scaler Achiever program

# POSITIONS OF RESPONSIBILITY

- Founding member of IIIT Kalyani Free and Open Source Club
- General Secretary (Tech) at IIIT Kalyani
- Student Placement Coordinator at IIIT Kalyani

# HACKATHON SELECTIONS

- Hack in the North 4.0 - Finished in top 20
- iHack - Finished in top 20
- CodeUtsava 3.0 - 2nd Runner-up
- InOut 6.0 - Finished in top 15
- Hackabit 2018 - Most Innovative Hardware Hack Award
- Hackfest - Finished in top 20
- ETHIndia 2.0 - Selected for Grand Finale

# INTERESTS

- Image Processing
- Deep Learning
- Kubernetes and microservices
- Artificial Intelligence
- Blockchain and other decentralized systems

# OTHER PROJECTS

- Detection of handwritten trees and parsing them into computer understandable form using image processing (Ongoing)
- Automatic detection of various cricket moves like “no-ball” and the umpire’s decision and verification of the same using deep convolutional neural networks. (Ongoing)
- A shopping system similar to Amazon Go at a very cheap price. This project won “Most Innovative Hardware Hack” award at HACKABIT 2018, a naional level hackathon organized by BIT Mesra, Ranchi.
- Blockchain based E-tendering system
- AI and prediction market based fake news control system