

Aman Pratap Singh

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EDUCATION	B.Tech in Computer Science & Engineering, Junior Year 2016 - 2020(Expected) Indian Institute of Technology Bhubaneswar <ul style="list-style-type: none">CGPA of 8.17/10 (Autumn 2018)
	Senior Secondary School 2013 - 2015 Kids Corner Happy Sr. Sec. School, Firozabad <ul style="list-style-type: none">94.60% - CBSE Class 12th
	Secondary School 2011-2013 Gyandeep Sr. Sec. Public School, Shikohabad <ul style="list-style-type: none">CGPA of 10/10 - CBSE Class 10th
EXPERIENCE	Software Developer at CERN-HSF, Google Summer of Code 2018 Apr, 2018 - Aug, 2018 <i>Mentored by Prof. Ulrik Egede, Dept. of Physics, Imperial College, London and Mr. Jakub Moscicki, Mr. Diogo Castro, Mr. Enric Tejedor from EP-SFT Group, CERN Geneva, Switzerland</i> Google Summer of Code Student Developer at CERN's High Energy Physics Software Foundation. Worked on an open source summer project to facilitate computing intensive jobs submission to Condor backend at CERN. The project was sponsored by Google and co-mentored by EP-SFT group at CERN and Imperial College, London . After successful completion of the project, received a Letter of Recommendation from the project's chief mentor, Prof. Ulrik Egede.
	Open Source Contributor, Jupyterlab Active member and contributor of Project Jupyter and part of Jupyterlab organisation on GitHub. Fixed Documentation and GUI bugs in Jupyterlab repository of project.
TECHNICAL SKILLS	Programming Languages - C, C++, Python, Javascript(Basic), Assembly Language Other Languages - HTML5, CSS3, Markdown Tools/Frameworks - Git, Docker, Flask, jQuery, STL, L ^A T _E X, SQL Software Tools - Logisim, GNUSim-8085, Visual Studio Code
RELEVANT COURSES	Discrete Structures, Data Structures and Algorithms, Operating System, Computer Organisation and Architecture, Formal Language and Automata Theory, Numerical Methods, Managerial Economics, Entrepreneurship and Small Business Management, Computer Networks*, Database System*, Computational Geometry* (*: Ongoing in current semester)
ACHIEVEMENTS AND AWARDS	<ul style="list-style-type: none">Leader of Team Champions_sam comprising 6 students from IIT Bhubaneswar which participated in Smart India Hackathon 2019 and won the first prize for Cisco's problem statement under the theme Smart Communication at public places.Represented IIT Bhubaneswar's Team which got 6th Rank among 22 participating IITs in Jio Developers Hackathon of Inter IIT Tech Meet 2018 held at IIT Bombay.Selected for student scholarship by Project Jupyter for attending JupyterCon - 2018 held in New York.Selected for Google Summer of Code 2018 by European Organization for Nuclear Research (CERN).Qualified JEE Advanced - 2016 with an All India Rank(Gen) of 2393 among 1,55K candidates.Qualified JEE Mains - 2016 with an All India Rank(Gen) of 5962 among 1.1 million candidates.Won several prizes in inter and intra-college level Hindi literary writing competitions.
POSITION OF RESPONSIBILITIES	<ul style="list-style-type: none">Student Internship Coordinator of the Computer Science and Engineering batch of 2016-2020.Leader of Developers Students Club, IIT Bhubaneswar powered by Google Developers.Governor - Web & Design Society of the Students' Gymkhana, IIT Bhubaneswar.Core Team Member of Neuromancers, Programming Society of the Students' Gymkhana, IIT Bhubaneswar.

SELECTED
PROJECTS

- **Large Scale backend for Jupyter Notebook:** This project implements an extension for Jupyter Notebook and also integrate it to SWAN Notebook service which is a cloud data analysis service developed at CERN. This extension easily submits and monitor computation intensive jobs to HTCondor backend using Ganga toolkit. The frontend extension displays a widget showing status of current jobs in Notebook itself and also allow termination of ongoing jobs.
- **SwayamSevak :** At many public places like Railway Stations and Hospitals, for basic information the enquiry window usually becomes a bottleneck and leads to bad user experience due to the crowd and large queues. This project developed a solution (Web Dashboard and interactive chatbot) using technologies like Natural Language Processing and webRTC that can be used to manage public announcements in a physical space by Auto detecting people when user walks into physical space using WiFi connection, prompt user to join support messaging room for that physical location, Develop a chat bot that can answer frequently asked question for location, Allow facility administrator to broadcast messages to all people currently present in physical space.
- **LifeBot :** A Telegram Bot supported by NLP Engine to find disease from symptoms, search for possible self care, medications, disease details and specialization. Also shows the list of nearby doctors who can help in this regard. APIMEDIC APIs are used for finding disease details from symptoms and Google Search API has been used for finding possible medical care that can be given to patient. This project was developed for Jio Developers Hackathon under Inter IIT Tech Meet 2018.
- **cpusim :** A 8 bit RISC Architecture CPU Simulation in Logisim with support for all basic mnemonics of Intel 8085 microprocessor. The assembler for converting Assembly Code to Binary is written in Python.
- **Paper Portal :** A webapp for aggregating and displaying past year semester examination papers created using django framework in Python.

HOBBIES

Competitive Coding, Open Source Contribution, Indian History, Politics, Gaming, Literature