

# Siba Smarak Panigrahi

Department of Computer Science and Engineering

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## Education

- 2018 – 2022    📖 **B. Tech in Computer Science and Engineering, Second Year, Indian Institute of Technology, Kharagpur**  
GPA: 9.77/10.00 (after 3 semesters)
- 2018    📖 **All India Senior School Certificate Examination (AISSCE) - 2018.**  
Secured 98.6% (AIR 3 in KVS, Rank 1 in KVS, Bhubaneswar Region). Among the top 0.1% of the 1.16 million candidate.
- 2016    📖 **All India Secondary School Examination (AISSE) - 2016.**  
CGPA 10 in AISSE (Rank 1 in CBSE, Bhubaneswar Region) .

## Research Interests

Deep Learning, Natural Language Processing, Algorithms

## Research Experience

- December 2019    📖 **Winter Research Intern at Tata Institute of Fundamental Research, Mumbai**  
Advisor: Prof. Rahul Vaze  
Tried to minimize the approximation factor for ONLINE FACILITY LOCATION problem with NON-LINEAR UTILITY FACILITY MOVEMENT COST and a GLOBAL COST determined with distance from source.
- October 2019    📖 **To develop deep learning tools to predict the association of the 5' end of the long non-coding RNA to gene ID with the help of TF ID**  
Advisor: Prof. Pralay Mitra  
Determining the differences in the normal and tumor samples. Best ten 5' end of the lncRNA with the involvement of a maximum number of cancer types will be selected for experimental verification

## Academic Achievements and Honors

- **Smart India Hackathon** (2020)  
Qualified in the campus round and came in top 5.
- **Technology Alumni Association (Delhi Chapter) Award** (2019)  
Rank 1 in 1st year (amongst 1384 students) in IIT, Kharagpur.
- **Open IIT Maths Olympiad, IIT Kharagpur - Gold** (2019)  
Our team bagged first prize amongst all the teams participated.
- **Jagadis Bose National Science Talent Search - Senior Scholar** (2018)  
Rank 2 amongst all the students participated.
- **Attended Republic Day Parade in New Delhi as Prime Minister's Guest** (2017)  
Invited due to excellent academic performance in AISSE 2016.

- **Exchange student in Sakura Science Exchange Program, Japan** (2016)  
Selected among 90 students of India which included 35 from KVS.
- **Rank 1 in IISER Aptitude test, OUAT and IMA Entrance Examination** (2018)
- **JEE Advanced (AIR 1554), NEET (AIR 6432), AIIMS (Percentile 99.25)** (2018)
- **All India Rank 45 in NEST conducted by NISER** (2018)
- **Qualified Indian Statistical Institute Entrance Examination** (2018)
- **KVPY Fellowship - SX** (2017)
- **NTSE Scholar** (2016)
- **KVS INMO Training camp attendee** (2015, 2016)  
Qualified KVS JMO and appeared Indian National Mathematical Olympiad (INMO) twice.
- **Regional Mathematical Olympiad (RMO)** (2016)  
Rank 2 amongst all the students participated in Odisha Region.

## Key Projects

### April 2020

#### Write Your Thoughts

Used Django to design a platform for literary enthusiast to express themselves in stories, poetry or thoughts and to appreciate others' work.

#### Student GPA

Used various Machine Learning algorithms to predict the GPA of a student, with the prior knowledge of GPA of previous semesters.

### September 2019

#### EarthQPlot

- Created a GUI Applet in Java to show the locations of Earthquakes around the world utilising data from RSS Feed.
- Enhanced features to distinguish between Land and Ocean earthquake, and show relevant statistical results.

## Relevant Coursework

Completed	<ul style="list-style-type: none"> <li>Programming and Data Structures, Mathematics I, Mathematics II, Discrete Structures, Algorithms I, Signals and Networks, Introduction to Electronics.</li> </ul>
Ongoing	<ul style="list-style-type: none"> <li>Probability &amp; Statistics, Software Engineering, Formal Language and Automata Theory, Switching Circuits and Logic Design.</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>Algorithmic Toolbox, Object-Oriented Programming in Java, Machine Learning, Deep Learning Specialization Deep Learning, Computer Vision, Data Science &amp; Machine Learning (World Quant University), Introduction to HTML5, Django.</li> </ul>

## Skills

Coding	<ul style="list-style-type: none"> <li>Python, C, Java, <math>\text{\LaTeX}</math>, Octave.</li> </ul>
Other	<ul style="list-style-type: none"> <li>Git, Keras, Tensorflow, Numpy, Matplotlib, Scikit-learn, Pandas.</li> </ul>

## Skills (continued)

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Web Dev & Databases	📖	Django, HTML, CSS, Tomcat Web Server, MySQL, PostgreSQL, Oracle.
Languages	📖	Strong reading, writing and speaking competencies for English, Hindi, Odia.

## Activities and Leadership

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- **Mathematics Mentor, MissionEd: Revolutionising Education:** Start-up to enhance the quality and interaction of the education for the students dreaming to study in IITs. Mentored students from various parts of India for Mathematics highly essential for IIT-JEE examination.
- **Team Leader (Geometry & Topology Team), The Theoretical Mathematics Reading Group, IIT Kharagpur:** A reading group under UG Students' Council, IIT Kharagpur to develop interest amongst students towards research in Computer Science and Mathematics. Taught and attended sessions on Basic Topology, Graph Algorithms, Number Theory and Matrix Algebra.
- **Student Member, Institute Wellness Group, IIT Kharagpur:** Friendly neighborhood wellness body of the campus, responsible for organising events that help to make students of the institute aware of certain mental issues and methods to combat them. Organized and attended Gatekeeper training programs and awareness drives in campus.
- **Coordinator, Code Club, Department of Computer Science and Engineering, IIT Kharagpur:** Departmental body to organise coding related events and hands-on workshops in the campus. Organized and attended Workshops and Competitive programming classes in campus.

## References

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Upto 3 references Available on Request