


# Prateek Sarangi

Near Kirba Chowk, Bshantkunj, Burla, Sambalpur, Orissa - 768017

+91 8114306491 | sarangiprateek80@gmail.com

## SOCIAL PROFILES

 <https://www.linkedin.com/in/prateek-sarangi-23100a13b/>

## SKILLS

### Programming Languages

- C
- C++
- Java
- Python
- Javascript
- R
- HTML
- CSS

### Databases

- PostgreSQL
- MySQL

### Tools

- MS Word
- MS Excel
- MATLAB
- NetBeans

### Domain Skills

- Machine learning
- Deep learning
- Cloud computing
- Arduino
- Raspberry Pi
- Amazon web services(AWS)
- Natural Language Processing
- Serverless Computing

### Operating System

- Windows
- Linux

## ACHIEVEMENTS

- ▶ Reached in **Top 10** teams in **InnoBuzz Hackathon** conducted by HackerEarth
- ▶ Received appreciation certificate for being **School Captain**
- ▶ Reached in **Odisha Zone Finals** and secured **66th** rank in the region in **17th SOF International Maths Olympiad**
- ▶ Secured **First** Position in Inter-School U-19 Cricket Tournament

## SUMMARY

Self-motivated and enthusiastic **Computer Science Engineering Professional** currently pursuing B.Tech (2017-2021) from Veer Surendra Sai University of Technology, Burla; offering sound knowledge of Machine learning, Deep Learning, Cloud Computing, Database Autotuning and Serverless Computing. Possesses sound familiarity with MATLAB, Java, Python, R and C & C++ Programming. Have in-depth knowledge of coding of Embedded Systems and Raspberry Pi. An excellent communicator with good analytical skills with a zeal to excel in **Data Science** and **Machine Learning** domains.

## PROFESSIONAL DETAILS

**Research Intern** 20 May'19 - 6 Jul'19

**NIT Rourkela**

- ▶ **Language Used:** Python
- ▶ Gained hands-on experience in **Video Synopsis Generation** and **Summarization** using deep Semantic features.
- ▶ The project is about generating text from the crime videos provided so that a summary report can be generated.

**Research Intern** 21 Jun'18 - 20 Jul'18

**IIT Bhubaneswar**

- ▶ **Language Used:** Python
- ▶ Gained hands-on experience in **Artificial Neural Network, Machine Learning and Direct modelling**.
- ▶ Designed and simulated XOR Gate using Artificial Neural Network
- ▶ Irish Flower Clustering using K-means clustering. The project is about unsupervised learning of the Irish flower dataset.

## ACADEMIC DETAILS

**B.Tech/B.E.**

Computer Science & Engineering  
Veer Surendra Sai University of  
Technology | 2021  
CGPA - 7.00/10.00

**XII**

Kendriya Vidyalaya, Bargarh | 2017  
Percentage - 89.60%

**X**

Kendriya Vidyalaya, Bargarh | 2015  
CGPA - 10.00/10.00

## PROJECTS

### Database Autotuning using Large Scale Machine Learning

- ▶ This project uses machine learning algorithms to generate a recommendation for DBA to get the best possible knob settings
- ▶ **URL** - <https://github.com/prateeksarangi/ottertune>

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## WORKSHOPS

- ▶ **Cloud Computing with BigData and Hadoop** in IIT Delhi
- ▶ **IoT with Arduino** in IIT Delhi

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## EXTRAMURAL ENGAGEMENTS

- ▶ Participated in **21st National Children Science Congress** Intra-Regional level on the topic- Energy: Explore, Harness and conserve
- ▶ Participated in **22nd National Children Science Congress** Intra-Regional level on the topic- Understanding water and climate
- ▶ Wrote Poems on online platforms (link:- <https://joker11299.blogspot.com/>)

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## REFERENCES

### Dr. Manas Ranjan Kabat

Associate Professor and HOD  
Veer Surendra Sai University of  
Technology, Burla  
hod\_cse@vssut.ac.in  
Head of Department

### Mr. Vikash Sharma

Assistant Professor  
Birla Institute of Technology, Mesra  
vikash.sharma@bitmesra.com  
Mentor - Project

### Mr Khitish Behera

Project Manager  
Capgemini  
khitish.behera@capgemini.com  
Mentor - Project

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## PERSONALITY TRAITS

- ▶ Strong Communication Skills
- ▶ Leadership
- ▶ Teamwork
- ▶ Analytical Skills
- ▶ Problem Solving Skills
- ▶ Decision Making Skills

## Pixelation

- ▶ Developed a maze solver robot which acts upon the instructions provided from the over-head camera and follows the shortest path from start to end
- ▶ **URL**- [https://github.com/prateeksarangi/pixelation\\_NSSCKgp](https://github.com/prateeksarangi/pixelation_NSSCKgp)

## Video Stabilizer

- ▶ The objective is to stabilize the image obtained from a camera mounted on a four-legged bot to help proper implementation of the line following
- ▶ **URL**- <https://github.com/prateeksarangi/ImageStablizer>

## Video Summarization and Synopsis Generation

- ▶ This project aims at generating summary and synopsis of the crime video helping in criminal report writing
- ▶ **URL**- <https://github.com/prateeksarangi/pVideo-Summarization-with-LSTM>
- ▶ **URL**- [https://github.com/prateeksarangi/vsum\\_dsf](https://github.com/prateeksarangi/vsum_dsf)

## Virtual Simulation of a Computer using Java

- ▶ Simulated a compiler independent code base to act like a computer using Java
- ▶ **URL**- [https://github.com/prateeksarangi/Virtual\\_Box/setitngs](https://github.com/prateeksarangi/Virtual_Box/setitngs)

## Holonomic Motion Planning using Encoder and LSA

- ▶ Motion planning of holonomic robot using reverse kinematics so as to follow the line provided and play the game. The same was applied in Robocon 2019 design of the final structure.
- ▶ **URL**- [https://github.com/prateeksarangi/pRobocon\\_Codes](https://github.com/prateeksarangi/pRobocon_Codes)

## Robo Soccer

- ▶ Robo Soccer is a domain designed to advance robotics and AI research through friendly competition
- ▶ Small size league is one of the RoboCup league, focuses on intelligence multi-agent cooperation and control over a highly dynamic environment

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## CERTIFICATES

- ★ TensorFlow and Keras for Neural Network and Deep Learning
  - ★ Data Scientist's Toolbox | Coursera
  - ★ R Programming for Data science | Coursera
  - ★ Javascript Masterclass
  - ★ Embedded Systems Programming on ARM Cortex-M3/M4 Processor
  - ★ Crash Course in Deep Learning with Google Tensorflow | Python
  - ★ Learn Ethical Hacking from Scratch
  - ★ AMCAT Certified Data Processing Specialist
  - ★ AMCAT Certified Customer Service Specialist
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## **TO WHOM IT MAY CONCERN**

It is my pleasure to strongly recommend Prateek Sarangi, a student of VSSUT, Burla in Computer Science & Engineering Branch for Summer Internship in Microsoft.

I am Dr. Manas Ranjan Kabat, a Head of Department, Computer Science and Engineering, VSSUT Burla. During our time together, Prateek Sarangi displayed great talents in Algorithm design, Machine learning and Artificial Intelligence. When we first met, I was immediately impressed with him, but during the time we worked together, his understanding of algorithms grew far more.

It's not just his technical skills that impress me, however, his sincerity and dedication towards work is very much noteworthy.

I am absolutely confident that Prateek would be a great asset for your esteemed organisation. I am confident enough that any project on the period of internship that is to be assigned to him, he is capable to handle and complete the same within the stipulated time frame.

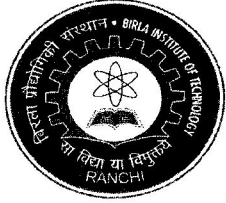
Sincerely,

Dr. Manas Ranjan Kabat

HOD, Department of Computer Science and Engineering

VSSUT, Burla

  
[Signature]



# **Birla Institute of Technology, Mesra**

(Deemed to be University u/s 3 of UGC Act, 1956)

**Off-Campus Deoghar**

**Jasidih, Deoghar-814142, Jharkhand, India**

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It gives me immense pleasure to write few lines of recommendation for Mr. Prateek Sarangi, student of fifth semester, Computer Science and Engineering at VSSUT, Burla, Sambalpur, Odisha. Prateek is not my direct student. But in past three years we had interactions and discussions on career shaping and project works.

I have seen the hunger for knowledge, learning and updating technical skills in him. Prateek has good communication skills (written and verbal). He has good command on C++, Python, Matlab and R.

In addition to the regular academic classes at VSSUT, Burla he has got certificate courses from Coursera on The Data Scientist's Toolbox, March 2019, R Programming, April 2019 and from Udemy on Tensorflow and Keras for Neural Network and Deep learning, May 2019, A crash course in Deep Learning with Google Tensorflow | Python, May 2019; Javascript Masterclass, July 2019. It reflects his interest in learning the skills required by industries in future and making him a preferred candidate for employment by leading industries.

As a part of summer internship, at the end of second semester he went to IIT, Bhubaneswar where he got an exposure to Machine learning technique and its applications and at the end of fourth semester he went to NIT, Rourkela to learn Video Summary and Synopsis Generation using deep semantic features.

He has actively participated in Robo Soccer-2019, Robocon 2019, InnoBuzz hackathon conducted at VSSUT, Burla on the occasion of Samavesh 2019, Ethical Hacking, September 2019 to name a few. The projects/ tasks carried out in these competitions were highly appreciated by the experts.

I have noted good leadership skills in him and also observed that he is comfortable in working in team.

I wish him a bright future and hope he will be an asset for the organization recruiting him in future.

*Vikash Sharma*  
*24/09/2019*

**Vikash Sharma**

**Department of Electronics and Communication Engineering**

**Email: [vikash.sharma@bitmesra.ac.in](mailto:vikash.sharma@bitmesra.ac.in)**



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## RE: Letter of Recommendation for Prateek

1 message

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**Behera, Khitish Chandra** <khitish.behera@capgemini.com>  
To: Prateek Sarangi <sarangiprateek80@gmail.com>

Tue, Sep 24, 2019 at 3:20 PM

Hello Prateek,

As discussed you can use this mail as my recommendation for your Summer Internship.

### TO WHOM IT MAY CONCERN

It is my pleasure to strongly recommend Prateek Sarangi, a student of VSSUT, Burla in Computer Science & Engineering Branch for Summer Internship in Microsoft.

During our time together, Prateek Sarangi displayed great talents in Deep Learning and Cloud Computing.

It's not just his technical skills that impress me, however, his sincerity and dedication towards work is very much noteworthy.

I am absolutely confident that Prateek would be a great asset for your esteemed organisation. I am confident enough that any project on Software Engineering that is to be assigned to him, he is capable to handle and complete the same within the stipulated time frame.

Please feel free to connect me in case any further details needed about Prateek.

*Thanks & Regards,*



**Khitish Behera**

Project Manager, DCX\_Solution

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[www.capgemini.com](http://www.capgemini.com)

People matter, results count.

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