



Prateek Sarangi

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Burla, Bargarh

EDUCATION

Bachelor of Technology (B.Tech), Computer Science & Engineering
(2017 - 2021)

Veer Surender Sai University of Technology

CGPA : 7.07/10

XII (Senior Secondary), Science

Year of Completion: 2017

CBSE Board (Kendriya Vidyalaya, Bargarh)

Percentage : 89.60%

X (Secondary)

Year of Completion: 2015

CBSE Board (Kendriya Vidyalaya, Bargarh)

CGPA : 10.00/10

INTERSHIPS

Research Internship

NIT ROURKELA (Rourkela)

May 2019 - Jul 2019

Video Summary and Synopsis Generation using deep semantic features.

Under the guidance of Dr Bhibudatta Sahoo, Associate Professor, NIT Rourkela.

Research Internship

IIT, BBSR (Bhubaneswar)

May 2018 - Jul 2018

Machine learning technique and application.

Under the guidance of Prof. Dr Ganapathi Panda, Ex-Professor IIT Bhubaneswar.

POSITIONS OF RESPONSIBILITY

- Organiser - Introbotics 2018 VSSUT Burla

- School Vice Captain - Kendriya Vidyalaya, Bargarh session 2015-16
 - School Captain in Kendriya Vidyalaya, Bargarh session 2016-17
 - Core technical member Robotics Society, VSSUT, Burla.
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TRAININGS

Ethical Hacking From Scratch

udemy (Online)

Aug 2019 - Sep 2019

<https://www.udemy.com/certificate/UC-C5ZUFIE0/>

Javascript Masterclass

udemy (Online)

Jun 2019 - Jul 2019

Udemy course on Javascript

<https://www.udemy.com/certificate/UC-3QQRH3X/>

Embedded Systems Programming On ARM Cortex-M3/M4 Processor

udemy (Online)

May 2019 - May 2019

Udemy course on microcontroller coding.

<https://www.udemy.com/certificate/UC-GDVM7KJA/>

R PROGRAMMING

Coursera (Online)

Apr 2019 - Apr 2019

R programming for data science course provided by Coursera.

<https://www.coursera.org/account/accomplishments/verify/CQCD2GWBM8YM>

Data Scientist Toolbox

Coursera (Online)

Feb 2019 - Mar 2019

This course provides an introduction to the tools and ideas of data science provided by Johns Hopkins University through Coursera.

<https://www.coursera.org/account/accomplishments/verify/UXD6FDNFDUXF>

Deep Learning

udemy (Online)

Feb 2019 - Feb 2019

A Visual Learners Guide to Building Neural Networks Using Keras. In this training, I have developed a deep neural network for prediction of the bike purchases given a dataset of past buyers with their social and economic background.

Tensorflow/Python

udemy (Online)

Jan 2019 - Feb 2019

Building a machine learning model using TensorFlow python, custom deep neural network to transfer learning models.

<https://www.udemy.com/certificate/UC-R93X3789/>

PROJECTS

Virtual simulation of a computer using Java

Aug 2019 - Sep 2019

https://github.com/prateeksarangi/Virtual_Box/settings

Simulating a compiler independent code base to act like a computer using java

Robo Soccer

Jan 2019 - Mar 2019

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

Fish detection

Dec 2018 - Jan 2019

<https://github.com/prateeksarangi/InnoBuzz>

This is for the InnoBuzz hackathon conducted at VSSUT, Burla in the occasion of Samavesh 2019. This idea was to detect which type of fish and whether the fish is fresh or not using Image processing.

Quad-Copter

Nov 2018 - Dec 2018

Making a FPV drone using ArduPilot flight-controller.

Video Stabilization

Nov 2018 - Nov 2018

<https://github.com/prateeksarangi/ImageStablizer>

Stabilization of video feeds from a Webcam using Lucas-Kanade method of Optical flow. 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.

Pixelation

Sep 2018 - Oct 2018

https://github.com/prateeksarangi/pixelation_NSSCKgp

Solving a image of maze(size 320x320) using image processing by the help of a overhead camera feedback.

Holonomic motion planning using encoder and LSA

Aug 2018 - Oct 2018

https://github.com/prateeksarangi/Robocon_Codes

Motion planning of holonomic robot using reverse kinematics so as to follow the line provided and play the game, It was applied in Robocon 2019 design of the final structure.

Database autotuning using large scale machine learning

Aug 2019 - Present

<https://github.com/prateeksarangi/ottertune>

This project uses machine learning algorithms to generate a recommendation for DBA to get the best possible knob settings

Video Synopsis Generation

Jul 2019 - Present

https://github.com/prateeksarangi/vsum_dsf

This project is about generating a synopsis of the video provided. So that we can distinguish the important part of the video and save us a lot of time while evaluating.

Video Summarization

Jun 2019 - Present

<https://github.com/prateeksarangi/Video-Summarization-with-LSTM>

This project is to generate a summary of the video provided using LSTM network.

SKILLS

Machine Learning

Intermediate

Python

Intermediate

C++ Programming

Advanced

Raspberry Pi

Intermediate

Linux

Intermediate

R Programming

Intermediate

MATLAB

Intermediate

GitHub

Intermediate

C Programming

Advanced

Java

Intermediate

JavaScript

Intermediate

HTML

Advanced

Deep Learning

Intermediate

Cloud Computing

Beginner

Arduino

Intermediate

Amazon Web Services (AWS)

Beginner

MySQL

Intermediate

Natural Language Processing
(NLP)

Intermediate

WORK SAMPLES

GitHub Profile:

<https://github.com/prateeksarangi>

Blog Link:

<http://prateeksarangi80.blogspot.com/?m=1>

Other Portfolio Link:

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

ADDITIONAL DETAILS

- A strong enthusiast in the field of Robotics. Hands-on experience and ongoing work in Image Processing and Machine learning. Experienced in coding of Arduino, Raspberry pi and ROS(Robot Operating system). Skilled in languages C++ and Python.
- Currently looking for internships in the field of Industrial Robotics and Machine Learning to boost up my knowledge in this field.
- Gold Medallist in International Math Olympiad in 2015
- Finalist InnoBuzz hackathon 2019 organised by Hackerearth.
- Reference:-
 1. Dr Manas Ranjan Kabat, Head of Department, Computer Science and Engineering, VSSUT Burla
 2. Mr Vikash Sharma, Assistant Professor, BIT Mesra
- Gold Medalist in National Science Olympiad in 2015

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

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 the career shaping and project works with him.

I have seen the hunger for knowledge, learning and updating knowledge 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 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, and from Coursera he had certificate courses on The Data Scientist's Toolbox, March 2019, R Programming, April 2019. It reflects his interest in learning the skills required by industry and making him a preferred candidate for employment by leading industries.

As a part of summer internship, at the end of second semester he joined IIT, Bhubaneswar and at the end of fourth semester he went to NIT, Rourkela. In these institutes, he got an exposure to Machine learning technique and application and 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 in 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. He is also 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.