

JOEL JOSEPH

ACADEMIC PROFILE

Degree/Certificate		Institution				Percentage/CGPA	Year
B-Tech		Mechanical Engineering IIT (BHU), Varanasi				7.83	2021
Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI	Sem VII	Sem VIII
7.48	7.16	5.29	5.60	7.44	8.82	9.34	8.67
ISC (XII)		Green Woods Public School, Kasaragod				93.75	2016
ICSE (X)		St. Peter's School, Kasaragod				92.80	2014

SKILLS

Machine Learning

Python Libraries:
Sklern, Numpy, Pandas, PyTorch, Keras and Tensorflow.
Sub-Fields:
Data Science, Computer Vision, Reinforcement Learning.

PROJECTS

Pixelate

Jan 2018 - Mar 2018

Participated in Pixelate competition.

The Pixelate competition part of the annual Institute TechFest involved developing an autonomous bot which can navigate a maze using input from an overhead camera. I developed code for object detection, localization and navigation in MATLAB without the use of Machine Learning techniques (as per the rules).

Damage Detection in Structures using Artificial Intelligence

Nov 2019 - May 2019

BTech Project

During the course of 6 months we developed a theoretical framework for the detection and quantization of cracks in metallic/non-metallic structures by processing the input from Laser Sensor using simple Neural Networks.

Open-Source Contribution

Jan 2020 - Apr 2020

Contributed to machine learning package mlpack.

mlpack is the most popular C++ Library used for machine learning purposes ranging from Computer Vision to Reinforcement Learning, hosted on Github. I wrote documentation, fixed bugs and developed some functions for the Reinforcement Learning part of the library.

[Github](#)

NeurIPS Reproducibility Challenge 2020

Dec 2020 - Jan 2021

Reproduced and Verified Experimental Results of a NeurIPS paper

We reproduced the code of the paper "La-MAML: Look-ahead Meta Learning for Continual Learning", verified that the results of the paper were consistent with ours, ran some ablations and published a report on our findings. [Arxiv](#)

POSITION OF RESPONSIBILITY

Computer Vision Head

Jun 2019 - Aug 2020

Head of Computer Vision Team at AUV

The Autonomous Underwater Vehicle (AUV) team of the Institute has taken part in National Level Championships. It has Mechanical, Electronics, ROS and Computer Vision sub-teams. I led the Computer Vision team in developing the code framework for Object Detection and Localization on Underwater Images using PyTorch.

T: 9497319129 **E:** joeljosephjin@gmail.com **Address:** Mundiyanickal House,
Puthariyadukkam P.O, Kerala