

Ambu Karthik

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Bengaluru, Karnataka

in Ambu Karthik

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SUMMARY

An enthusiastic and energetic person who is always curious behind the technologies that run our world. Always eager to learn and understand how things are working. I am greatly interested in Data science, Robotics and Automation, and have worked in those fields as well.

SKILLS

- | | | |
|----------|---------------------|--------------------|
| ○ C | ○ OOPs | ○ Machine learning |
| ○ C++ | ○ Data Structures | ○ Deep learning |
| ○ Python | ○ Algorithms design | ○ Image processing |
| ○ Java | ○ Robotics | ○ Web Development |

EDUCATION

R.V. College of Engineering

B.E. in Computer Science and Engineering

Bengaluru, KA

August 2018 - Present

Kendriya Vidyalaya IISc.

CBSE Class XII, 95.6%

Bengaluru, KA

March 2018

EXPERIENCE

Team Astra Robotics

Subsystem Head - Autonomous

Bengaluru, KA

Sept 2018 - Present

- Developed an interface to control a robot over a local network using a simple PS4 controller connected to the base station computer
- Developed a user interface to analyse various values of a rover as it traversed the field in the competition IRC 2020
- Wrote bash and python scripts to autonomously control the rover with an initial signal as per IRC 2020 rules
- Developed various robots using many open source boards like Arduino and Raspberry Pi by integrating computer vision for autonomous decisions

Centre for Society and Policy, Indian Institute of Science

Research Intern

Bengaluru, KA

June 2019 - Sept 2019

- Developed a simple user interface using iPython to analyse various dependency results on the provided dataset to draw inferences
- Analysed given data using various machine learning metrics to predict future outcomes according to the data collected
- Contributed to research by analysing survey data which was collected for a research project aimed towards saving the cauvery river basin in Kodagu district, Karnataka

PROJECTS

Implementation of GANs in HPCC Systems using GNN Bundle

Jan - July, 2020

- Developed an interface to use various GAN models on HPCC Systems, a distributed computing cluster for increased speed in training of the models
- Designed a module on the HPCC Systems for users to conveniently use GAN without building the architecture for it
- Added a support module to the GNN bundle to convert images into tensors in the language ECL for convenience of users in training neural networks with image data
- Designed an architecture for GANs to run on HPCC Systems by understanding the working of GANs