

ARKAJYOTI BASAK

GitHub : iamarkaj

Email : arkajbasak1211@gmail.com

Mobile : +91-9051-902-862

PROFESSIONAL EXPERIENCE

Google Summer of Code (GSoC)

May 2021 - Present

JdeRobot - Universidad Rey Juan Carlos

- Developed RoboticsAcademy Docker Image for ROS-Noetic and VNC-based web template with hardware acceleration support using TurboVNC and VirtualGL.
- Integrated RoboticsAcademy drone exercises to web-based template and migrated all the exercises from ROS-Melodic to ROS-Noetic.
- Improved the platform by adding features like **connection protocols** for sequential launching, **on-demand logs**, **automatic evaluator** based on Plotly.js
- Link to the GSoC-blog

POSITION OF RESPONSIBILITY

Open Source Developer at JdeRobot

Maintainer of RoboticsAcademy drone exercises

SKILLS

Programming Skills: Python, C++, Bash

Frameworks: Git, ROS, Docker, OpenCV, PyTorch

Softwares: SolidWorks, Ansys, PTC Creo

Operating Systems: Ubuntu(Linux), Windows

PROJECTS

AI Learns to Park | Python, PyTorch, C#, Unity 3D

- Developed a self-improving car parking game.
- Implemented different Reinforcement Learning algorithms like DQN, Rainbow-DQN.

Split & Rephrase model | Python, NLTK, PyTorch

- Developed a NLP model that can break long English sentence into multiple sentences.
- Improved the performance by fine-tuning the input at atalki.com

Drone Mapping | Python, Qt, ROS

- Developed a GUI application and configured it to rospy.
- Created the drone controller to implement 3D-Mapping & Navigation.

Foldable Helmet Design | SolidWorks, Ansys, 3DEXPERIENCE

- Designed and analysed a virtual prototype of a foldable motorcycle helmet.
- Selected amongst the top 4 projects and showcased in the webinar organized by La Fondation Dassault Systèmes.

EDUCATION

Thapar Institute of Engineering and Technology

Bachelor of Technology in Mechanical Engineering

Patiala, India

2018 - 2022 (Expected)

St. Xavier's Institution

Indian School Certificate

Kolkata, India

2017

St. Claret School

Indian Certificate of Secondary Education

Kolkata, India

2015