

KRISHNARANJANI R

Tamil Nadu, India

Mail ID: krishnaranjani@madrasresearch.org Contact: 9790351509

Website: <https://krishnaranjani.github.io/Krish/>

Institutional Website: www.madrasresearch.org

EDUCATION

Master of Engineering (M.E), Computer Science & Engineering (2020 – March 2022)

Velalar College of Engineering and Technology (**Anna University**)

CGPA: 9.8 /10 (Up to Date)

Bachelor of Engineering (B.E), Computer science & Engineering (2016 –2021)

Velalar College of Engineering and Technology (**Anna University**)

CGPA: 9.39/10

Dissertation: GPS Controlled Robotic Vehicle for Environmental Impact Analysis.

TECHNICAL SKILLS

- **Programming Languages:** Python, R, C++, JavaScript, Java, SQL
- **Framework:** Scikit-Learn, SciPy, Matplotlib, Arudino, Bootstrap, Django, MATLAB, PyTorch, TensorFlow, Keras, Flask
- **Techniques:** Machine learning, Robotics, Neural networks, Data visualization, User interface design, Natural Language Processing, Computer Vision
- **Tools:** Colab, Git, Jupyter, Pycharm, Android Studio, Blender, Unity, Rstudio

PUBLICATIONS

- GPS Controlled Robotic Vehicle for Environmental Impact Analysis, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 9, Issue 3, March 2020. (Impact Factor: 7.569)
- Modeling Cognitive System with Applied Machine learning in Additive Manufacturing using Fifth Generation Computer Systems, IOP Science: Journal of Physics

CONFERENCE

- Presented a paper titled "Defence on Cyber Crimes Against Women and Laws in India" at the "National Conference on Big Data Analytics for Cyber Intelligence and Defense on Cyber-crimes against Women."
- Presented a paper titled "GPS Controlled Robotic Vehicle for Environmental Impact Analysis" in the "National Conference on Computing Communication Technology and Science "(NCCCTS'20).
- Participated in Industry Standard 4.0- Disruptive Technology Summit on 23rd and 24th March-2018 by BIT.
- Participated in International Conference on Robotics, Intelligent Automation and Control Technologies (RIACT 2021).

PROFESSIONAL EXPERIENCE

Madras Scientific Research Foundation

CEO & Director

2020 – Present

Research Area: Machine learning, Computer vision, Deep learning, Robotics

- Leading the development of organizations short term and long-term strategies
- Creating and implementing the organization mission and vision to bridge the gap between rural and urban areas in the technical knowledge of underprivileged students
- Trained and managed 500 students in various levels
- Published 100+ research machine learning blogs
- Closely worked with research students of the UBC, the KTH, the TU Delft

Zelight Robotics

Inplant Training

2018-05 - 2020-06

- Worked on hardware and software systems for robotics design
- Experience developing, implementing, managing robotic, autonomous systems projects
- Assisted in Troubleshooting, diagnose and fix real time software based on analysing integrated system behaviour

TEACHING EXPERIENCE

Course: Python Programming

Private Tutor (2020 -Present)

- Total number of students trained: 52(to Date)

Course: Machine Learning

Private Tutor (2020 -Present)

- Total number of students trained: 46(to Date)

KEY PROJECTS

PROJECT AREA: Machine Learning, Additive Manufacturing, Web Development, Deep Learning, Android Application, Internet of Things, Robotics

- **GPS controlled robotic vehicle for environmental impact analysis**
 - Developed an automated robotic vehicle which observe environmental data, by establish Audio and video communication for analysing environmental impacts through Android Application
- **Edification gateway android application for career guidance**
 - Built responsive app with interactive program to trace and identify users' interest, based on their Qualification to provide computer-assisted for guiding students and graduates in choosing their privileged career.
- **Modeling cognitive system with applied machine learning in additive manufacturing using fifth generation computer systems**
 - The model emphasizes distinguishing distinct emotions from Carnatic music and imparts the evident feeling as a 3-Dimensional object.
- **Medicine tracking with IOT system**
 - Developed automated medicinal tracker to track patients' supply and usage of medication. Designed Prototype for the medicine box with IoT components and web application that receives IoT signal for computations.
- **Simulation of nozzle flow in 3D print by material point method**
 - Develop and employ modeling and simulated nozzle flow of 3D print by MPM
- **Cybercrime analysis and reporting system**
 - Design and develops software for Cybercrime reporting system to guide cyberattack victims to file the complaint utilizing NLP and machine learning techniques.
- **E commerce for online medicine shopping**

HONORS AND AWARDS

- Best Research Project Award (2020)
- Best Performer in International Space Science Competition 2020
- Won Second prize in Project Expo in MechFest-2016 “Edification Gateway” academic year 2019-2020 with cash prize of 5,000 INR.
- Participated in Edu sat Program Conducted By IIRS- Indian Space Research Organisation and Completed 5 Outcome Programmes

SERVICE

- Designated Secretary of Data pirates club – during the academic year (2019-present)
- Member at Toastmasters club - during the academic year (2018-2019)
- Member at Entrepreneurship development cell- during the academic year (2018-2019)
- Executive member in Magnumpous – during the academic year (2019-2020)
- Executive member in women empowerment cell (WEC) – during the academic year 2017-2020

INVITED TALKS

- Datapirates Club (2019): Data Analysis and Data Security
- VCET (2019): DNA Digital Data Storage
- Magnumpous (2020): Refresher series “Programming”
- Datapirates Club (2021): Data Breach