KRISHNARANJANI R

Banglore, India
Mail ID: rkrishnaranjani12@gmail.com Contact: +91 9790351509

EDUCATION

Master of Engineering (M.E), Computer Science & Engineering

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

- CGPA: 9.86 /10
- **Dissertation**: Integration of Cyber-attack Profiling System Using Machine Learning Approaches and Natural Language Processing

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

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++, C#, JavaScript, Java, SQL
- **Framework:** Machine Learning, Computer Vision, Matplotlib, MATLAB, PyTorch, TensorFlow, Keras, Flask, AWS, NLP, Jetson nano
- **Tools:** Colab, Git, Jupyter, PyCharm, Android Studio, Blender, Unity, RStudio, MRTK

PROFESSIONAL EXPERIENCE

HKBK College of Engineering **Jan 2020 – Present**

Assistant Professor, Department: AI and ML

- **Courses Taught:** Principles of Artificial Intelligence (21AI54), R Programming (21CSL483), Design and Analysis of Algorithms (BCS305), Data Structure and its Application (BCS304), Natural Language Processing(21AI643), Artificial Intelligence (BAD402**)**
- Achievement: Maintained a 98% pass rate across all courses
- Research Integration: Integrating research findings into curriculum for enhanced student learning.
- Active Research: Engaged in research initiatives aimed at advancing AI and ML methodologies and collaborated companies like intel and NVIDIA

Madras Scientific Research Foundation

CEO **Nov 2020 – Present**

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

- Designing, developing, and researching Machine Learning systems, models, and schemes.
- Authored professional scientific papers for publishing in peer reviewed journals.
- Improved accuracy of simulation by 30 % using Complex Algorithm. Developed unique research into immersive Learning
- Enriching existing ML frameworks, TensorFlow, AWS and libraries

Zelight Robotics

Inplant Training **May 2018 –June 2018**

- 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

PUBLICATIONS

- S.Nithya, **R. Krishnaranjani**, V.Kirubakaran, R. Madhu Vaishnavi, "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)
- R Ajithbabu, **R Krishnaranjani**, Jk Rohith, Saranya Kavileswarapu, Siddharth"Modeling Cognitive System with Applied Machine learning in Additive Manufacturing using Fifth Generation Computer Systems", IOP: Journal of Physics,2021 J. Phys.: Conf. Ser. 2115 012033

CONFERENCE

- **Krishnaranjani R,** "Integration of Cyberattack Profiling System Using Machine Learning Approaches and Natural Language Processing" International Conference on Advances in Digital Transformation, Software Technologies and intelligent IoT systems (ICADSIS 2022).

- **Krishnaranjani R,** "Modeling Cognitive System with Applied Machine learning in Additive Manufacturing using Fifth Generation Computer Systems", International Conference on Robotics, Intelligent Automation and Control Technologies (2021).
- **Krishnaranjani R,** "Defence on Cyber Crimes Against Women and Laws in India", the National Conference on Big Data Analytics for Cyber Intelligence and Defense on Cyber-crimes against Women, (2019).
- **Krishnaranjani R,** "GPS Controlled Robotic Vehicle for Environmental Impact Analysis", National Conference on Computing Communication Technology and Science (2020).
- **Krishnaranjani R,** "Integration of Cyberattack Profiling System Using Machine Learning Approaches and Natural Language Processing," International Conference on Artificial Intelligence & Smart Computing (ICAISC 2022).
- Participated in Industry Standard 4.0- Disruptive Technology Summit on 23rd and 24th March-2018 by BIT.

KEY PROJECTS

- **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 (TB Patients)**
  - 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 modelling and simulated nozzle flow of 3D print by Material Point Method
- **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

HONORS AND AWARDS

- IIT Bombay Incubation Summit Finalist (2024)
- Massachusetts Institute of Technology Hacking medicine Finalist (2023)
- Schneider Electric Go green 2022 India Finalist
- Best Research Project Award (2020) at VCET
- Best Outgoing Student Award (2020) at VCET
- Won Second prize in Project Expo in MechFest-2016 "Edification Gateway" academic year 2019-2020 with cash prize of 5,000 INR.

INVITED TALKS

- Datapirates Club (2019) at VCET: Data Analysis and Data Security
- VCET (2019): DNA Digital Data Storage
- Magnumpous (VCET,2020): Refresher series "Programming in C"
- DatapiratesClub (VCET, 2021): Data Breach
- 3 Days Workshop on Data Analytics with R programming (2023)