Sai sree Nathala

nathala2003@gmail.com 9392722850 Suryapet

CAREER OBJECTIVE

To apply my analytical and problem-solving skills in advancing scientific knowledge, while continually developing expertise and contributing meaningfully to impactful research.

WORK EXPERIENCE

Research Internship 01/2024 – 05/2024
University of Agder Norway
Research Intern within the ACPS research team at UiA, Norway. This experience has provided me with theoretical as well as practical knowledge in Signal processing and Deep Learning.

Software Developer 05/2023 – 07/2023
SEIL and SATCARD Lab, IIT Palakkad
Explored AWS IoT core service and other related services provided by Amazon web services(AWS) for Internet of Things(IoT) applications.

EDUCATION

Research scholar 08/2024 – present
Indian institute of Science, Bangalore Bangalore, India

B.Tech in Electrical Engineering 07/2020 – 07/2024
Indian Institute of Technology Palakkad Palakkad, India
CGPA: 8.04/10

Exchange Student Program 01/2024 – 05/2024
University of Agder Grimstad, Norway

Intermediate M.P.C (Board of Intermediate Education, T.S) 2018 – 2020
Sri Chaitanya College Hyderabad,Telangana
Percentage: 96.7 / 100.00

SKILLS

- Python
- Pytorch
- Machine learning
- Deep Learning

PROJECTS

UAV-Target Detection and Tracking utilizing the Fusion of mmWave FMCW Radars and Vision-based Sensors
(Bachelor's Thesis)
- Led the installation and configuration process of hardware components, including FMCW mmWave radars, RGB and thermal cameras, within a robotics framework (ROS), facilitating synchronized data acquisition from multiple sensors for autonomous drone applications.
- Designing and implementing algorithms to integrate radar and camera data, leveraging dynamic adaptability to enhance target detection accuracy, reliability, and versatility in diverse environmental scenarios, contributing to advancements in autonomous systems and security applications.

Vessel Type Classification utilizing Underwater Acoustic Data and Deep Learning
Developed and implemented a novel lightweight convolutional neural network (CNN) for precise classification of underwater vessels using acoustic data, achieving a remarkable accuracy of 93.53% on the VTUAD dataset while optimizing model size to 19.5 MB, surpassing performance benchmarks of established CNN architectures.

A Deep CNN-based Hand Gestures Recognition in Complex Backgrounds using High Resolution Thermal Imaging
Developed and implemented an innovative end-to-end edge computing system utilizing a high-resolution infrared camera for precise hand gesture recognition in challenging environmental conditions, achieving 99.79% accuracy with superior performance in low-light settings and complex backgrounds.

POSITION OF RESPONSIBILITY

Class Representative 08/2023 – 12/2023
IIT Palakkad

COURSES

Foundation Level in Programming and Data Science
Indian Institute of Technology Madras
Successfully completed the Foundational level courses in Programming and Data Science over a period of one and a half years at IIT Madras, in addition to my BTech curriculum.

Machine learning for Data science
IISc Bangalore

Medical imaging
IISc Bangalore