SREELEKSHMI SAJU

[Linkedin](#)   [Portfolio](#)   [GitHub](#)   [Leetcode](#)   [Hackerrank](#)

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PROFILE

Motivated and detail-oriented graduate in Computer Science with a strong foundation in Python programming and a keen interest in software development. Eager to gain hands-on experience in AI, Machine Learning, IoT, and embedded systems through real-world projects. Quick learner with good problem-solving skills, adaptable to multi-technology environments, and committed to continuous growth in a supportive and innovative workplace.

EDUCATION

- **M.Tech in Computer Science and Engineering (Artificial Intelligence and Machine Learning)**,
  Amrita Vishwa Vidyapeetham, India (CGPA: 7.7)   2022 – 2024

- **Bachelor of Technology in Electrical and Electronics Engineering**,
  Amrita Vishwa Vidyapeetham, India (CGPA: 6.78)   2017 – 2021

- **Higher Secondary Education**,
  Govt Fisheries Higher Secondary School Kuzhithura, India (Percentage: 73.58%)   2016 – 2017

- **High School Education**,
  Govt. High School Azheekal,India (Percentage: 94%)   2014 – 2015

TECHNICAL SKILLS

- **ProgrammingLanguages:** Python, JavaScript, HTML, CSS

- **AI & ML :** TensorFlow, PyTorch, Scikit-learn, Matplotlib, Keras, Generative AI, Model Training & Evaluation

- **Data Processing:** Pandas, NumPy, Data Labeling, Data Cleaning, Preprocessing, Data Exploration, Data Labeling

- **Computer Vision & Natural Language Processing (NLP):** OpenCV, GANs, Grad-CAM, Foundational knowledge of NLP concepts and techniques

- **Core Concepts:** Object-Oriented Programming (OOP), Data Structures and Algorithms, Computer Science Fundamentals

- **Development Tools:** Jupyter Notebook, VS Code, Google Colab, Git ,Github, Docker, MATLAB

- **Embedded Systems & IoT:** Microcontrollers, Raspberry Pi, Arduino

SOFT SKILLS

- Time management, Teamwork, Mentoring, Adaptability

- Critical Thinking, Decision Making

- Strong Written and Verbal Communication, Results-Oriented

- Self-motivated, Quick learner, analytical Skills

- Organized and meticulous, Skilled in multitasking

- Excellent attention to detail, Desire to learn in new areas, Team Collaboration and Interpersonal Skills

- Passion for learning and maintaining a growth mindset, Results-Driven with a Research-Oriented Approach

- Open to Feedback and Agile Mindset

- Proactive, Innovative, and Growth-Oriented

PROJECTS

- **Fetal Heart Ultrasound Image Enhancement and Anatomical Feature Recognition via GAN and Grad CAM.** 2024
  - Enhanced fetal heart ultrasound images using Pix2Pix GAN (supervised learning) and achieved 98.9% segmentation accuracy, addressing real-world diagnostic challenges in fetal echocardiography.
  - Applied PCA (dimensionality reduction) and K-means clustering (unsupervised learning) to extract meaningful anatomical patterns from unlabeled data, improving segmentation quality and model training.
  - Improved model interpretability using Grad-CAM to visualize critical regions in predictions, enhancing clinical trust in AI-assisted diagnostics.

- **SMART HOME WITH CONDITION MONITORING.**2021
    - Designed a Smart Home Automation system with real-time condition monitoring for elderly users, enhancing domestic security and convenience.
    - Integrated multi-sensor data for accurate health tracking and developed a user-friendly interface . • Utilized an Arduino controller on the Proteus platform, incorporating applications and communication modules to promote innovation.

WORK EXPERIENCE

Teaching Assistant / Ai - IoT Lab in Charge   Jan 2022 - Oct 2022
Amrita Vishwa Vidyapeetham   *India*

- Conducted hands-on sessions in AI and IoT, simplifying complex concepts for over 300 students.
- Improved lab engagement by facilitating practical learning experiences, assessing curriculum development to match industry standards while promoting economic growth and industrialization in tech education. Focused on enhancing student understanding through leadership and effective communication.

PUBLICATIONS

- Fetal Heart Ultrasound Image Enhancement and Anatomical Feature Recognition via GAN and Grad CAM, IEEE,2024
- Smart Home with condition monitoring, Springer,2021

CERTIFICATIONS

- HackerRank Software Engineer Intern Certificate
- HackerRank Software Engineer Intern Certificate
- HackerRank Python (Basic) Certificate
- Hackerrank Problem Solving (Basic) Certificate
- Hands-on Internet of Things, Coursera
- Artificial Intelligence Foundations: Machine Learning, LinkedIn Learning
- Hackerrank Software Engineer Certificate

COURSES

- Introduction To Python Programming, Udemy
- Coding Essentials - Logic Building, Udemy
- Learn to Program:The Fundamentals, University of Toronto - Coursera
- Computer Science:Programming with a Purpose, Princeton University - Coursera
- Intro to TensorFlow for Deep Learning, udacity
- Hands-on Internet of Things, Coursera
- Algorithms on Graphs, coursera

WORKSHOPS

- **FDP on Recent Trends in Robotics,**   Sep 2022
  Electronics and ICT Academies at IIT Roorkee, MNIT Jaipur, NIT Patna, and PDPM IIITDM Jabalpur.
- **Rigbetel Lab Robotic Workshop**   2022
- **Arduino And Raspberry Pi, HUT Lab, 2019**   2019
    - Participated in a training program conducted by HUT LAB, Amrita Vishwa Vidyapeetham, focusing on Arduino operation. • Successfully designed a wheeled robot and gained a foundational knowledge of Raspberry Pi

LANGUAGES

- English
- Malayalam