SAISAB SADHU

Indian Institute of Science Education and Research Bhopal (IISER Bhopal)

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in https://in.linkedin.com/in/saisab-sadhu ⚙ https://github.com/saisab21

EDUCATION

B.S. Data Science and Engineering
Indian Institute of Science Education and Research Bhopal

📅 December 2021 – July 2025 📍 Bhopal, India

Cumulative Performance Index - 6.92

Higher Secondary/12th
U.P. Public School

📅 June 2020 📍 Suri, India

Percentage - 92.20 %

Secondary/10th
U.P. Public School

📅 June 2018 📍 Suri, India

Percentage - 94.40 %

PROJECTS & CONTRIBUTIONS

Perception-Guided Model Predictive Control for Autonomous Navigation in Constrained Waterways
MOON's Lab, IISER Bhopal

📅 December 2023 - Present 📍 IISER Bhopal

Guide - Prof. Sujit PB

Alzheimer's Disease Detection using Computer Vision and Machine Learning
Trustworthy BiometraVision Lab, IISER Bhopal

📅 August 2023 - December 2023 📍 IISER Bhopal

Guide - Dr. Akshay Agrawal
- Aimed towards a multifaceted approach combining cognitive analysis, CV, and ML for early detection of Alzheimer's disease. Collecting and preprocessing cognitive data (Handwriting, Facial Expression, Gait Analysis) and brain imaging analysis, extracting key features.
- Integration of findings to create a diagnostic tool with a multimodal approach.

Development of Polymer based Pressure Sensors and Enhanced Material Expansion Detection using Machine Learning
i-Lab , IISER Bhopal

📅 May 2023 - July 2023 📍 IISER Bhopal

Guide - Dr. Mitradip Bhattacharjee
- Custom polymer-based piezoresistive sensors were fabricated using PEDOT:PSS and PDMS, utilising 3D printing for microstructure fabrication. The different microstructure dimensions and shapes on the polymer and their response to pressure variations were studied.
- Machine learning techniques for predictive analysis and testing the sensors on inflatable objects with variable pressure were employed to achieve optimised results.

TECHNICAL SKILLS

Programming & Scripting Languages:

C, C++ (Arduino and ESP), Python (Pyautogui, GWPy, AstroPy, PyCBC, Bilby, NumPy, Matplotlib, Pandas, Jupyter Seaborn, ScikitLearn, SciPy, TensorFlow, Django, OpenCV, Keras, Pillow, YOLO), HTML, CSS, LaTeX

OS & Softwares :

MATLAB, Mathematica, STATA, Creo 3d , Autocad, Origin

Others:

Quantum Framework: (Qiskit) ; Database Management: (SQL, MongoDB)

CERTIFICATIONS & WORKSHOPS

7th Summer School on AI with focus on Computer Vision and Machine Learning
The Centre for Visual Information Technology (CVIT)

📅 August, 2023   📍 IIIT Hyderabad, India

Wolfram South Asia Virtual Technology Conference
South Asia Chapter

📅 February, 2023   📍 Online Conference

Introduction to Cybersecurity Tools Cyber Attacks
IBM

📅 May, 2023 - June, 2023   📍 Coursera

RELAVANT COURSES

Ongoing Couses:

- **DSE304** - Algorithms | **DSE311** - Applied Optimization | **DSE313** - Artificial Intelligence | **DSE316** - Deep Learning | **IPR500** - Law Relating to Intellectual Property and Patents

Credited Courses:

- **ECO201** - Econometrics-I | **ECO101** - Principles of Economics I | **ECO102** - Principles of Economics II | **MTH202** - Probability and Statistics | **ECS335** - Introduction to Process Mining | **DSE317** - Machine Learning | **DSE310** - Fundamentals of Database Systems | **DSE315** - Data Science in Practice | **ECS202** - Data Structures and Algorithms | **DSE312** - Computer Vision | **ECS203** - Basic Electronics | | **ECS201** - Discrete Mathematics I | **ECS204** - Signals and Systems | **PHY206** - Physics Through Computational Thinking | **PHY106** - Quantum Physics | **ECS102** - Introduction to Programming | **CHE103** - Engineering Design and Drawing

POSITIONS OF RESPONSIBILITY

Secretary
Student Developement Council, IISER Bhopal

📅 October, 2023 -Present   📍 IISER Bhopal, India

Founding Member (Chairperson)
Entrepreneurship Cell, IISER Bhopal

📅 December, 2023 - Present   📍 IISER Bhopal, India

Placement Coordinator
The Center for Career Development, IISER Bhopal

📅 August, 2022 - October 2023   📍 IISER Bhopal, India

REFEREES

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