ADITHYA MADHUSOODANAN

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EDUCATION

National Institute of Technology Karnataka, Surathkal *July 2019 - Present*
Minor in Information Technology Overall GPA: 8/10

National Institute of Technology Karnataka, Surathkal *July 2018 - Present*
B.Tech in Electrical and Electronics Engineering Overall GPA: 7.98/10

Silver Hills Public School, Kozhikode *April 2018*
Class 12, Central Board of Secondary Education Overall 95.4%
Physics, Chemistry, Maths, Computer Science

Silver Hills Public School, Kozhikode *April 2016*
Class 10, Central Board of Secondary Education GPA:10/10

SKILLS

Computer Languages	C/C++, MATLAB, Java, Python
Software & Tools	Tensorflow, Keras, ReMagX, SharePoint
Instruments	Vibrating Sample Magnetometry, X-Ray Reflectometry, X-Ray Diffraction, Pulsed Laser Deposition
Languages	English, Hindi and Malayalam

ACHIEVEMENTS

- Among top 0.8% in JEE Mains 2018 (amongst 1,200,000 candidates)

- Among Top 0.3% in Kerala State Engineering Entrance Exam (KEAM) (amongst 90,000 candidates)

- Secured Zonal Rank 35 and International Rank 1671 for the 10th SOF International Mathematics Olympiad

- Identified as a 'Bright Spot' in the state of Kerala by Vikram Sarabhai Science Initiative

- Secured first rank for Mathrubhumi Silver Bullet Exam

EXPERIENCE

University of Surrey, United Kingdom Apr 2020 - Present
Remote Summer Research Student, Department of Computer Science

- Analyzing and compiling a dataset consisting of images and video sequences containing streams of water
- Implementing an object detection algorithm on the dataset to detect streams of water in a video sequence

Project Guide: Prof. Frank Guerin

Muon, India - Website Mar 2020 - Present
Founder and Backend Developer

- Creating and hosting websites online
- Using PHP and MySQL to develop backend for websites

SQE Assurance, Derby, United Kingdom   Aug 2019 - Jun 2020
Systems Developer

· Handling content types, customizing forms via JSON and VS codes
· Developing apps for SharePoint using PowerApps
· Customizing SharePoint workflows
· Creating Customized SharePoint pages containing dashboard reports using PowerBi

Indian Institute of Science, Bangalore, India   May 2019 - Jul 2019
Summer Student, Spintronics and Thin Film Magnetism Labs

· Studied Quadratic Magneto-optical Kerr effect (QMOKE) properties of Fe_3O_4 thin films.
· Employed ReMagX Software for the X-ray reflectivity data fitting of thin films.
· Measured Magneto-optical Kerr effect (MOKE) properties of Mica thin films under various compressions.

Project Guide: Prof. PS Anil Kumar

PROJECTS, SCHOLARSHIPS & PAPERS

Intel Edge AI Scholarship Foundation Course - Certificate   Dec 2019 - Mar 2020
Udacity

· Learning basics of AI at the Edge
· Leveraging pre-trained models available with the Intel Distribution of OpenVINO Toolkit
· Converting and optimizing other models with the Model Optimizer, and performing inference with the Inference Engine

Haemorrhage Segmentation using Deep Learning - Github   Jan 2020 - Apr 2020

· Developed a Convolutional Neural Network that can read Computed Tomography images and then detect as well segment intracranial hemorrhage

Optical Number Recognition - Github   Jul 2018 - Mar 2019
IEEE National Institute of Technology, Surathkal

· Developed an Optical Number Recognition product that can read handwritten numbers and store them as text using handheld devices like a mobile camera.

Working Paper

· Using machine learning to manage personalised and adaptive notification on mobile devices to improve user experience

Collaborator: Prof. M Anand Kumar

EXTRACURRICULAR ACTIVITIES

Executive member, Flying and Robotics Club NITK - deploying machine learning techniques to create autonomous drones

Member, Marketing and Publicity Team, Incident 2019 (Annual cultural festival of National Institute of Technology Karnataka)

Volunteered for the Open House Programme of Centre for Water Resources Developement and Management (Jaladarshan 2017) held at Centre for Water Resources Development and Management, Kozhikode, India - had a hands on experience on the methodologies and techniques that can be used to save water and other natural resources.