### **ALAAP SARKAR**

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### ENTRY LEVEL ENGINEER | ARTIFICIAL INTELLIGENCE | ROBOTICS | MACHINE LEARNING

#### **PROFILE & VALUE**

- Postgraduate in Intelligent Systems and Robotics possessing a wealth of academic knowledge and hands-on experience in areas of Robotics, Artificial Intelligence and Machine Learning
- Demonstrated expertise in Artificial Neural Networks, Deep Learning Frameworks, Fuzzy Systems and Statistical Modelling; a list of projects that I have done can be found at my <u>GitHub</u> page
- Demonstrated proficiency in Project Management with abilities to contribute towards project planning, scoping & achieving the milestones within the defined timelines

#### **PROFICIENCY FORTE**

Machine Learning
Computational Optimisation
Algorithms & Data Structures
Project Management
Problem Solving
Quick Learner
Influential Communication
Prioritisation Skills

#### **EDUCATION & CREDENTIAL**

De Montfort University, Leicester, UK, 2018 – 2019

- M.Sc. Intelligent Systems and Robotics
- Master's thesis: Distinction
- Degree classification: Merit

S.R.M University, Chennai, India, 2014 – 2018

- Bachelors of Technology Mechatronics Engineering
- CGPA: 7.41/10

### Internship • A

### AiEdge (3<sup>rd</sup> Feb'20 – 6<sup>th</sup> Mar'20)

 Applied NLP for file search system which included extraction of keywords, dates and phrases for indexing and search using natural language.

## Coursework

**Academia** 

- Intelligent Mobile Robots
- Computational Intelligent Optimisation
- Applied Computational Intelligence
- Artificial Neural Networks

- Mobile Robots
- Al Programming (Prolog)
- Research Methods
- Fuzzy logic

#### Neuroevolutionary and Tailored Algorithm for seriously Large-Scale Problems

- <u>LMMAES</u> algorithm for neural network optimisation tested and improved on KDD cup MNIST data set The documentation and implementation can be found on my <u>GitHub</u> page
- Neural network classifier for <u>KDD Cup 1999 Data</u>
  - Implementation and improvement of the S algorithm for Convex Optimization
  - A memetic algorithm based on the S algorithm and Differential Evolution
  - Naive Bayes classifier to implement a controller for a robotic arm
  - Implementation of a particle filter for localisation

### **UG Project**

Masters Projects

### Design and development of control system for biomechanical testing device

Design and fabrication of a 2 DOF (roll and vertical linear motion) bone and low load application device
 The device is capable of testing the effects of load on low load human parts in X and Y planes

# Professional Development

- Kaizen Robotics Program
- PLC Programming and Application
- Organised national workshop on Robotics and Automation
- Industrial training at Hindustan motors
- TensorFlow in Practice Specialisation, Coursera
- Control Engineering course from NPTEL
- Organised one day workshop on Smart Actuation using SMA
- Short term training program on AI for Engineers
- Control of Mobile Robots' course, Coursera
  - Deep Learning Specialisation, Coursera

## ADDITIONAL INFORMATION

Languages: English, Hindi, Bengali and French

IT Proficiency: MS Office, LaTex, MATLAB, Python, Prolog, TensorFlow, Keras, Java

**References:** Available on request