AISHWARYA RAJASEKARAN

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EDUCATION

University of Massachusetts Amherst   Expected : May 2021

MS in Computer Science , Concentrating in Data Science   Amherst, MA

Courses : Neural Networks, Algorithms for Data Science, Systems for Data Science, Artificial Intelligence, ML

Indian Institute of Information Technology, Design and Manufacturing -Kancheepuram   Jun 2015 - Jun 2019

B.Tech in Computer Engineering, GPA : 9.18/10   Chennai, India

Courses : Programming and Data Structures, Design and Analysis of Algorithms, Database Systems, OOPS Practice ,
Designing Intelligent Systems, Entrepreneurship and Management Functions

PROFESSIONAL EXPERIENCE

Research Intern   May - Oct 2018

Robert Bosch Centre for Data Science and Artificial Intelligence Lab, IIT Madras.   Chennai, India

- Worked under Prof Balaraman Ravindran on classification of retinopathy .
- Developed a CNN model (Pytorch) that boosted the accuracy from 67% to 9.2% trained on 700 images
- Validated the model by applying visualization techniques (Occlusion, Activation maps)

Full Stack Web Developer Intern   May - July 2017

"IDeaS Lab. *Centre for Product Design and Manufacturing, IISC Bangalore "*   Bangalore, India

- Worked under Prof Amaresh Chakrabarti on software enhancement of InDeaTe Tool
- Resolved software (Django framework) issues and designed a logical model of database.
- Prepared a documentation for existing software to aid developers in the future

Summer Intern   May - Jun 2015

"Gas Turbine Research and Establishment, DRDO"   Bangalore, India

- Implemented encryption and decryption of text files using DES algorithm in Java

PROJECTS

Trust Metric for Image Classification   Sept - Dec 2019

Coursework project – CS 682 (Neural Networks)

- Proposed a confidence metric for multi-class neural network classifier using the labels of nearest neighbours.

Interpretability of Deep Learning Models for Image Classification   Oct 2018 - April 2019

B.Tech Thesis guided by Dr Balaraman Ravindran (IIT Madras) and Dr B Sivaselvan (IIITDM Kancheepuram)

- Proposed a post hoc interpretation for CIFAR 10 dataset using Approximate KNN using Locality Spatial Hashing

Fingerprint Recognition Based Portable Attendance System   Jan - Mar 2018

Funded by Design Innovation Center, IIITDM Kancheepuram

- Designed and developed a compact device that is used to monitor class attendance.
- The information can be accessed through a web portal. Saved time spent on taking roll calls in large lecture class

Heart Risk Prediction Based on Data Mining Techniques   Jan - Mar 2018

Coursework project – Data Mining

- Collaborated with Cardiologist and implemented a logistic regression model to predict heart failures in post-transplant patients with an accuracy of 92% trained on dataset of size 300.

SKILLS

Programming / Scripting Languages: Python,SQL,C,C++   **Frameworks and Tools:** Pytorch, Django, Spark

ACHIEVEMENTS

- Lead the team Nicostop at Canada India Acceleration Programs for Women Entrepreneurs'18 - Top 15/1600 teams
- Won Healthcare Startup Hackathon and prototyped a smoking cessation device during incubation period
- In the Top 1% of Computer Science Batch 2015 (80 students)