# AISHWARYA RAJASEKARAN

- 129 Brittany Manor Apt G,Amherst, MA 01002 •(413)326-4245 arajasekaran@umass.edu
  - aishwarya-rajasekaran.github.io
    www.linkedin.com/in/aishwarya-rajasekaran

#### **EDUCATION**

#### **University of Massachusetts Amherst**

MS in Computer Science, Concentrating in Data Science

Expected : May 2021 Amherst, MA

Courses: Neural Networks, Algorithms for Data Science, Systems for Data Science

# 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) with an accuracy of 79.2% 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**

## 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
- Introduced conformity metric to estimate the confidence on model.

#### **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 using the 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: C, C++, Python, SQL

Frameworks and Tools: Pytorch, Django, Hadoop, Git

# **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
- Conceptualized and led the Mentor Mentee Program team of 30 to help the 250 juniors with academic and social life
- In the Top 1% of Computer Science Batch 2015 (80 students)