

SRIRAM VIJENDRAN

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<https://sriram98v.github.io/>

EDUCATION

Iowa State University

Ph.D., Computer Science

Department of Computer Science

August 2021 - Present

SRM Institute of Science and Technology

Bachelor of Technology

Department of Electronics and Communications Engineering

June 2016 - May 2020

Overall Percentage: 82.5/100

TECHNICAL STRENGTHS

Tools Python, MATLAB, Javascript, C/C++, Java, Arch Linux, Rust, TensorFlow, Pytorch

EXPERIENCE

ORISE- USDA-ARS

Research Intern

August 2023 - August 2024

- Development and deployment of AI models to identify infections in histological samples.
- Devised Bayesian models for segmentation of histopathology images.
- Devise an Active Learning framework to optimize the sample selection for annotation.

Robert Bosch Center for Data Science and Artificial Intelligence

November 2020

Undergraduate Research

November 2019 -

- Development and deployment of Neural Network models for brain tumour segmentation
- Devised 3D convolution models for segmentation of MRI scan
- AI pipeline is set to be deployed in all state hospitals

AmberTag Analytics

Apparel Classification

September 2018 - December 2018 and December 2020 - May 2021

- Worked in a team of three people and Built Apparel Classifier using Deep Neural Networks.
- Employed low-level Tensorflow API to design efficient neural networks
- Conducted workshop for employees of AmberTag on building and deploying Deep Neural Network models

National University of Singapore

Research Internship

June 2018 - July 2018

- 1 of 183 participants selected throughout India.
- Hadoop basics and Map-Reduce using Cloudera
- Introduction to Hortonworks

FELLOWSHIPS

USDA-ARS Fellowship in Influenza A Virus in Swine Phylogenetics, USDA-ARS, 2023

Image Datapalooza Fellowship 2023, Imageomics Institute, 2023

Open Science Fellowship, COS, 2022

COURSES

Online Certification

Introduction to Programming with MATLAB

Structuring Machine Learning Projects

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization

Neural Networks and Deep Learning

Using Python to Access Web Data

Python Data Structures

Programming for everybody (Getting Started With Python)

Reinforcement Learning (CS6700 - IIT Madras)

AFFILIATIONS

Computational Biology Research Team

Ph.D. Candidate

January 2021 - Present

ISU

- Bioinformatics researcher

Center of Science

Open Science Framework

January 2022 - Present

COS

- Ambassador

Next Tech Labs — Student Research Lab

McArthy Lab

February 2018 - December 2020

SRMIST

- Syndicate of McArthy Lab

PROJECTS

EEG DREAMWALKER — IIT, DELHI

- Building models to predict vision from EEG signals by making use of microstate estimation in EEG signals, under the guidance of Prof. Tapan Gandhi. Uses 64-channel EEG recordings from brain vision for training data. Training data collected from blind patients before eye transplant surgery and after eye transplant surgery.

PARKINSONS DETECTOR — MEMBER, MINSKY LAB

- Implemented a simple shallow neural network to detect early onset parkinsons in a patient by making use of their audio waveform. Dataset was pulled from UCI Machine Learning Datasets. Final test Accuracy is 81

PUBLICATIONS

S. Vijendran and R. Dubey. Deep online sequential extreme learning machines and its application in pneumonia detection. ICITM, 2019 University of Cambridge.