Shangeth **Rajaa**

shangeth.com f20160442@goa.bits-pilani.ac.in | +91 7218540834

EDUCATION

BITS PILANI B.E. IN EEE AND M.SC. IN MATHEMATICS (DUAL DEGREE) May 2021 | Goa, India

LINKS

Github:// **shangeth** LinkedIn:// **shangeth** Twitter:// **@shangethr**

COURSEWORK

UNIVERSITY

Neural Networks and Fuzzy Logic, Non Linear Optimization, Probability and Statistics, Linear Algebra, Graphs and Networks, Numerical Analysis, ODE, PDE, Control System, Signals and Systems, Digital Image Processing

ONLINE

Deep Learning Nano degree Deep Reinforcement Nano degree Deep Learning Specialization Machine learning(Stanford) Stanford cs229, cs230, cs234

SKILLS

Languages: Python, C++, MATLAB, JS Technologies: Git, AWS, GCP, Heroku, Flask, LATEX

Frameworks: PyTorch, TensorFlow

OTHER EXPERIENCE

- Instructor for Deep Learning course with **Google AI** Explore ML.
- Mentor at Google Code-In with **Tensorflow** org.
- DL Content Developer at **OpenCV.org**'s "Deep Learning with PyTorch" course.
- Lead DL Course Developer at MindRabbit, US.
- Software Developer at KGLLP FIntech, Bangalore, India.
- Computer Vision Developer at Science and Technology Center, Chennai, India.
- Member | Society for Artificial Intelligence and Deep Learning(saidl.in).

EXPERIENCE

NANYANG TECHNOLOGICAL UNIVERSITY(NTU)| SPEECH AND LANGUAGE LAB | RESEARCH INTERN

August 2020 – Present | Singapore

- Working on Detection and Classification of Acoustic Scenes and Events(DCASE).
- Acoustic Classification with device mismatch.
- Speech Representation with information theoretical approaches(Unsupervised).

IBM RESEARCH LABS | RESEARCH INTERN

May 2020 - Aug 2020 | Delhi, India

- Developing novel quality metrics and data transformations for structured data.
- Optimization of Data Quality transformations with Deep Reinforcement Learning agents. [submitted to SIGMOD-2021]

INRIA | RESEARCH COLLABORATOR

April 2019 - May 2020 | Paris, France

- Orgranizing auto deep learning competitions for NIPS 2019.
- Research and Baselines for AutoCV, AutoCV2, AutoNLP, AutoDL and AutoSpeech competitions.

OPEXAI | DEEP LEARNING INTERN

September 2018 – November 2018 | Hyderabad, India

- Worked on computer vision projects in self driving cars with Deep Learning and Deep Reinforcement Learning
- Steering angle prediction of self driving cars, object detection/segmentation.

SELECTED PROJECTS

- Unsupervised Speech Representation with Information theoretical Approaches with Prof. Ashwin Srinivasan.
- Model based Deep Reinforcement learning for reduced exploration with Prof. Ashwin Srinivasan.
- Convolutional feature extraction and Neural Arithmetic Logic Units for stock prediction with Prof. JK Sahoo
- Cycle Generative Model for Semi Supervised Speech Recognition with Prof. Ashwin Srinivasan.

PUBLICATIONS

- [1] Z. Liu, Z. Xu, M. Madadi, J. J. Junior, S. Escalera, S. Rajaa, and I. Guyon. Overview and unifying conceptualization of automated machine learning. In *Workshop on Automating Data Science (ADS)*. ECMLPKDD, 2019.
- [2] Z. Liu, Z. Xu, S. Rajaa, M. Madadi, J. J. Junior, S. Escalera, and I. Guyon. Towards automated deep learning: analysis of the autodl challenge series 2019. In *Proceedings of Machine Learning Research*. NeurIPSCD, 2020.
- [3] S. Rajaa, N. Gupta, H. Patel, S. Chaitanya, R. S. Mittal, L. N, N. Panwar, S. Afzal, and S. Mehta. RI based framework to generate optimal data quality remediation sequence for machine learning. In *Submitted at SIGMOD-2021*. SIGMOD, 2021.
- [4] S. Rajaa and J. K. Sahoo. Convolutional feature extraction and neural arithmetic logic units for stock prediction. In *International Conference on Advances in Computing and Data Sciences*, pages 349–359. Springer, 2019.