Shivam Kaushik

Research Engineer

Links

Github:// mythrex LinkedIn://shivamkaushik73

Skills

DATA SCIENCE

Linear Regression, Logistic Regression Hypothesis Testing, Decision Trees Random Forest, Boosting Trees T-test, Bland Altman plots, CNN, RNN

FRAMEWORKS Pytorch, Tensorflow sklearn, FastAPI, Node.js, Vue.js

OTHER DVC, Git, AWS

Relevant Coursework

Linear Algebra, Multivariate Calculus

Probability, Intro to Information Theory Machine Learning Data Structures & Algorithms

Convolutional Neural Networks, Sequence Models

Education

2015-2019 B.TECH. IN CSE Guru Gobind Singh Indraprastha

University CGPA: 7.99/10

2014-2015 SR. SECONDARY

Maharaja Agrasen Model School

Percentage: 90.0%

Languages

English, Spanish, Hindi

Experience

OCTOBER 2020-PRESENT Origin Health.ai

Research Engineer

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Email: shivam.kaushik73@gmail.com

Web:http://mythrex.github.io

Begaluru

Worked extensively with medical image data. Setup dataset pipeline for data team and training pipelines for research team. Developed light traditional computer vision algorithms for classification tasks. Developed end to end hosted system for imprint removal from ultrasound images. Successfully conducted clinical validation study (employing 10 doctors) of developed segmentation and classification algorithms in real-world setting.

MARCH 2019-AUG 2019 Indian Space and Research Organisation (I.S.R.O.)

Deep Learning Intern

Worked on Neural Architechture Searcch (NAS) and hyperparameter optimisation. Developed offline system for hyperparameter optimisation and improved performance of NDVI prediction task by 2%. Implemented and adopted DARTS for semantic segmentation and obtained comparable performance with previous state-of-the-art networks.

JUN 2018 - AUG 2018 Trulymadly Matchmakers Private Limited (Delhi) **Back-end Developer**

Developed backend for a real time communication app using Node.js within 2 months of internship

Project / Blog

2020 Intuitive Explanation of DARTS

Deep Learning

A blog containing an intuitive explanation of math behind this influential paper. The paper is based on bi level optimisation and some workaround to reduce computation time.

2020 **Dreaming over Text**

Deep Learning, Pytorch-lighting

A mini-research turned into blog explaining how can deep-dream can be implemented on text data. And how can it be interpreted. Answering question like: "What if we take any hidden layer activation and try to increase its activations. What will happen to the text input?"

Achievements/Awards

2021 R.S.N.A. Conference

Submitted 2 researches as first author (under review).

2019 Data Science Bowl

Team: BabyGotHack, Top 11%

Data Science Bowl is the world's largest data science competition focused on social good.

2018 Smart India Hackathon

Finalist

This nationwide hackathon was hosted by M.H.R.D.The only team to be selected for internship at ISRO.