Russel Shawn Dsouza

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Education National Institute of Technology Karnataka, India 2017-2021

B. Tech in Electronics and Communications Engineering

Little Rock Indian School, Karnataka, India

2004-2017

K-12

Projects Computational Histopathology

> Built a supervised learning based model in PyTorch to perform the segmentation of nuclei in H&E stained histopathology images of kidney tissues.

Detecting Ponzi schemes in Ethereum smart-contracts

Used a semi-supevised learning based model built using PyTorch and torchtext on raw bytecode of Ethereum smart contracts mined using Google BigQuery.

Detecting the truth level of articles

Classified news articles into true, mostly true, half true, barely true, false and pants-fire with a supervised learning based classifier built using PyTorch and torchtext.

Real-time face detection and recognition

Implemented real-time face detection and recognition using OpenCV, scikit-learn and

dlib on a Raspberry Pi.

Technical Skills Languages: Python, MATLAB, C, Verilog, JavaScript

Frameworks/Libraries: PyTorch, scikit-learn, scikit-image, OpenCV, pandas

Web/App development: Django, React, JavaScript

Miscellaneous: git, Linux, Google BigQuery, Xilinx Vivado, LATEX

Experience Research Assistant

Nov 2019 - Present

under Dr. Shyam Lal, NITK

Karnataka, India

Working on the design and development of an automated colon cancer detection system from H&E stained histopathology images.

Research Intern

May 2019 - July 2019

under Dr. Shyam Lal, NITK

Karnataka, India

Worked on the segmentation of H&E stained histopathology images of kidney tissues to detect kidney cancer. Studied fundamentals of image processing, machine learning, deep learning, computer vision.

Frontend Developer

August 2018 - April 2018

IRIS, NITK

Karnataka, India

Worked on frontend design and development for 'IRIS', a digital portal for all administrative and academic activities in NITK, with five thousand daily active users.

Python Developer

May 2018 - July 2018

Pinnacle Media, Manipal, India

Karnataka, India

Worked on implementing real-time face detection and recognition using OpenCV, dlib and scikit-learn on Raspberry Pi

Computer Vision, Reinforcement Learning, Bionics, Augmented Reality

Interests