## 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

Notable 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-supervised learning based model, built using PyTorch and torchtext, on raw bytecode of Ethereum smart contracts mined using Google BigQuery, to detect Ponzi schemes.

Detecting fake news using deep learning

Built a classifier using PyTorch and torchtext to identify the truth level of news articles from verified facts and statements.

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, Rust, C, Verilog, JavaScript

Frameworks/Libraries: PyTorch, torchvision, torchtext, scikit-learn, OpenCV

Web development: Django, ReactJS, GatsbyJS

Tools: git, Linux, Google BigQuery, Xilinx Vivado, IATEX Hardware: Xilinx Artix 7 FPGA, Arduino, Raspberry Pi

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 building a deep learning model in PyTorch for the segmentation of H&E stained histopathology images of kidney tissues to detect kidney cancer. Implemented advanced image processing techniques in Python and MATLAB.

Frontend Developer

August 2018 - April 2019

IRIS, NITK

Karnataka, India

Worked on frontend design and developement 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

Interests Computer Vision, Neuroscience, Cybernetics, and Augmented Reality