Russel Shawn Dsouza

National Institute of Technology
Karnataka, India
russel.171ec143@nitk.edu.in

☐ (91+) 9611212081
in linkedin.com/in/rshwndsz
⭕ github.com/rshwndsz

Education	**National Institute of Technology Karnataka**, India *B.Tech in Electronics and Communications Engineering*	2017-2021 CGPA: 8.7
	Little Rock Indian School, Karnataka, India *K-12*	2004-2017

Notable Projects

Computational Histopathology
Worked on implementing convolutional encoder-decoder architectures 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 human 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, C, Rust, JavaScript, C++, Verilog
Frameworks/Libraries: PyTorch, torchvision, scikit-learn, OpenCV
Web development: Django, ExpressJS, ReactJS, GatsbyJS, GraphQL
Tools: git, Docker, Linux, Google BigQuery, Xilinx Vivado, LaTeX
Hardware: Xilinx Artix 7 FPGA, Arduino, Raspberry Pi

Experience

Winter Research Intern — Dec 2019 - Present
under Dr. Shyam Lal, NITK — Karnataka, India
Working on the design and development of an automated kidney cancer detection system from H&E stained histopathology images.

Summer Research Intern — May 2019 - July 2019
under Dr. Shyam Lal, NITK — Karnataka, India
Worked on reproducing state-of-the-art deep learning architectures for the segmentation of H&E stained histopathology images of kidney tissues.

Frontend Developer — August 2018 - April 2019
IRIS, NITK — Karnataka, India
Worked on building the frontend for the official student management portal 'IRIS' with more than five thousand daily active users including students, faculty, administrators and alumni. Mentored a freshman intern on frontend testing.

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   Medical imaging, computer vision, computational neuroscience and augmented reality