

SRISHTI YADAV

Email: srishtiy@sfu.ca

LinkedIn: <https://www.linkedin.com/in/srishti-yadav/>

Website: <https://srishti.dev/>

Contact: +1-778-996-4059

I am a machine learning engineer with an expertise in computer vision based applications. I am pursuing research at Simon Fraser University on kernel based tracking in images and have experience in implementing machine learning algorithms at scale.

SKILLSET

Software: MATLAB, Octave

Languages and Tools: PyTorch, TensorFlow, Python, Numpy, Scipy, OpenCV, Matplotlib, GDAL as well as cloud services like AWS

EDUCATION

Simon Fraser University, Canada

Master of Applied Science, January 2018- Present

CGPA: 3.92/4.33

JSS Academy of Technical Education, Noida, India

Bachelor of Technology, Electronics and Communication, June 2016

PROJECTS

Deep Attention Models for Human Tracking Using RGBD:

1. Worked in a team of 4 to develop an adaptive appearance model to accurately detect color camouflage, even in the presence of complex natural objects.
2. Improved the accuracy by approximately 50 % and reduced the type I error by 23% and type II error by 5%.

Celestini Project India:

1. Developed a prototype video analytic algorithms (68% accuracy) to run on Raspberry Pi 3 Model B.
2. Worked in a team of two where I was responsible for porting the code from MATLAB to OCTAVE. Also, worked on pre-processing the data to clean images, remove noise to infer position, lane and density of vehicles in front of the camera.

Prototype Landslide Risk Communication System:

1. Developed a system which forecasts and communicates occurrence of landslides.
2. Conducted field survey and implemented a system for sensor deployment (sensors, microcontroller boards, GSM module etc).

EXPERIENCE-INDUSTRY

Machine Learning Intern

February 2020- present

UrtheCast, Vancouver, Canada

1. As part of R&D team, I solely implemented machine learning system for satellite data (Landsat8, SPACRS, Sentinel 2 dataset) for multi-class prediction of cloud, shadow and haze.
2. Implemented data ingestion pipeline to incorporate high volume of multi-dimensional data into standard format.
3. Scaled the algorithm using cloud based services like AWS EC2 for deployment server, S3 for data storage and docker for creating virtual environment and parallel deployment of multiple training jobs.

Robotics Intern

April 2016- June 2016

Omnipresent Robot Tech, Delhi, India

Worked in the domain of robotics, tracking with Arduino, OpenCV C++, and intelligent electronics. The project included Speedobotix, an Arduino-based robot.

EXPERIENCE- RESEARCH

Graduate Research Assistant

Jan 2018- present

Networked Robotics and Sensing Laboratory, SFU
School of Applied Science, SFU, Canada

Project Associate

August 2017- November 2017

Indian Institute of Technology Kanpur, India
Department of Aerospace Engineering, IIT Kanpur, India

Research Intern

May 2017- July 2017

Indian Institute of Technology Delhi, India
Department of Electrical and Computer Science, IIT Delhi, India

Research Intern

June 2016- April 2017

Indian Institute of Technology Mandi, Himachal Pradesh, India
School of Computing and Electrical Engineering, IIT Mandi, India

PUBLICATIONS Book Chapter

Chaturvedi, P., Thakur, K., Mali, N., Kala, V. U., Kumar, **S.**, **Yadav**, S. & Dutt, V. (2017). A Low-Cost IoT Framework for Landslide Prediction and Risk Communication. In CRC Press: Internet of Things Concepts, Technologies, Applications, and Implementations (2017)

Journals

Rasoulidanesh, M., **Yadav**, **S.**, Herath, S., Vaghei, Y., & Payandeh, S. (2019). Deep Attention Models for Human Tracking Using RGBD. *Sensors*, 19, 750.

Selected for poster at **WiML Workshop, NeuRIPS 2019**

Conferences

1. **Yadav**, **Srishti** & Payandeh, Shahram. (2018). Real-Time Experimental Study of Kernelized Correlation Filter Tracker using RGB Kinect Camera. IEMCON.2018.
2. Naresh, M. , Chaturvedi, P. , **Yadav**, **S.** , Dutt, V. , Uday, K. V. (2017). 'Training of Sensors for Early Warning System of Rainfall Induced Landslides'. World Academy of Science, Engineering and Technology, International Science Index, Geotechnical and Geological Engineering, 11(12), 373.