ShahRukh Athar

Education

2018– **Ph.D. Computer Science**, *Stony Brook University*, New York, USA.
GPA: 4.0/4.0

2016–2018 **M.Sc Data Science**, *Skolkovo Insitute of Science and Technology*, Moscow, Russia.
GPA: 4.79/5.0

2012–2016 **B.Sc (Research) Physics**, *Shiv Nadar University*, Gautam Buddha Nagar, India, Minor: Mathematics.
GPA: 8.23/10.0

Teaching Experience

Stony Brook University

Fall 2018 **TA**, *CSE101: Introduction to Computational and Algorithmic Thinking*.

Shiv Nadar University

Spring 2016 **TA**, *CSD-201: Introduction to Data Structures*.

Monsoon 2013 **TA**, *PHY-105: Introduction to Computational Physics I*.

Spring 2014 **TA**, *PHY-102: Introduction to Physics II*.

Monsoon 2014 **TA**, *PHY-105: Introduction to Computational Physics I*.

Programming Languages and Technologies

Languages C, C++, Python, JavaScript, Matlab, Common Lisp

DL Frameworks PyTorch, Keras, Tensorflow, Lasagne, Theano

Publications

2019 ShahRukh Athar, Evgeny Burnaev, Victor Lempitsky. *Latent Convolutional Models*. International Conference on Learning Representations (ICLR), 2019.

2018 ShahRukh Athar, Abhishek Vahadane, Ameya Joshi, Tathagato Rai Dastidar. *Weakly Supervised Fluid Filled Region Localization In Retinal OCT Scans*. International Symposium on Biomedical Imaging (ISBI), 2018.

Internships

Summer 2017 Intern at SigTuple, Bangalore

✉ *sathar@cs.stonybrook.edu* • *https://github.com/srxdev0619*
http://shahrukhathar.github.io/about/

Worked on weakly supervised fluid-filled region localization in Retinal OCT scans.

Summer 2016 Intern at Computational Materials Discovery Laboratory, Moscow Institute of Physics and Technology

Worked on using deep learning in crystal structure and property prediction.

Summer 2015 Intern at Computational Materials Discovery Laboratory, Moscow Institute of Physics and Technology

Worked on machine learning algorithms for crystal structure and property prediction. Created the Anduril neural network library.

Master's thesis

2018 Latent Convolutional Models

In my thesis, I worked on a latent model of images that served as a strong universal prior for a wide variety of image restoration tasks.

Undergraduate thesis

2016 Predicting Amplitudes of the *e*A (Electron-Ion) interaction with Machine Learning

For my undergraduate thesis I used neural networks to predict amplitudes of electron-ion collisions. The predictions of amplitudes is essential to study the structure of the nucleus of the ion.

Projects

Anduril

Anduril is a neural network library written in C++ for python.

Documentation: `http://srxdev0619.github.io/Anduril-stable/`

Code: `github.com/srxdev0619/Anduril-stable`

Input Generator

A webapp that generates input files for the USPEX algorithm.

Link: http://han.ess.sunysb.edu/input_generator/

Narsil

Narsil is an Octree library for use with the Sartre event generator.

Scholarships and Awards

2016-Present Full Scholarship at Skolkovo Institute of Science and Technology

2012-2016 Full Tuition Fee Waiver at Shiv Nadar University

Extra Curricular Activities

2016 Highest Commendation at MUN:Continuous Crisis Committee at Shiv Nadar University

2014-2016 President of Inspiria, the business club of Shiv Nadar University