# ShahRukh Athar

### Education

2016-Present M.Sc Computer 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

#### Shiv Nadar University

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

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

2013

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

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

2014

# Programming Languages and Technologies

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

DL PyTorch, Keras, Tensorflow, Lasagne, Theano

Frameworks

## Internships

Summer 2017 Intern at SigTuple, Bangalore

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.

Summer 2014 Intern at Oganov's Lab, Stony Brook University

Created a webapp that generates input files for the USPEX algorithm.

# Undergraduate thesis

2016 Predicting Amplitudes of the eA (Electron-Ion) interaction with Machine Learning For my undergraduate thesis I used neural networks to predict amplitudes of electronion 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

#### Publications

2018 ShahRukh Athar, Abhishek Vahadane, Ameya Joshi, Tathagato Rai Dastidar. Weakly Supervised Fluid Filled Region Localization In Retinal OCT Scans. ISBI 2018.

## 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