

# Nima (Ross) Sarajpoor

Github: <https://github.com/NimaSarajpoor>

Website: <https://nimasarajpoor.github.io/blog/>

Alberta, Canada

[nimasarajpoor@gmail.com](mailto:nimasarajpoor@gmail.com)

+1 (587) 284 8089

## Highlights (hyperlinks included)

### • Machine Learning

- **Experienced with several libraries in Python** including TensorFlow, Scikit-learn, Numpy, Pandas, and Numba.
- **Experienced with supervised and unsupervised machine learning models** (see IEEE Journal in which a dependent elastic distance is used to preserve shape of patterns in multi-dimensional time series data)
- **Added two new features to the machine learning library mlxtend** to enhance feature selection module, particularly for categorical data (see mlxtend PR#957)
- **Implemented arbitrary-length anomaly detection algorithm** while reducing its computing time by providing a warm start (see MERLIN PR#505)
- **[WIP] Adding a major feature to STUMPY library to support top-k neighbors in matrix profile algorithm**, which can speed up the computation for the discovery of motifs with different lengths (see PR#595 and PR#586)
- **Created tutorials in machine learning** (see POSTS)
- Familiar with **TensorFlow** for constructing deep learning models.

### • Programming

- **Proficient in Python**, led lectures for a crash course on python with more than 50 participants
- Familiar with **data structure and algorithms**, ranked 5<sup>th</sup> in Programming Contest (CCPC).
- Experienced with **refactoring** (see PR#656) and **unit testing** (see PR#657)
- Experienced with version control **Git**

### • Math

- **Strong quantitative reasoning**, verified an equation after fixing the typo (see the long proof here: VALMOD notebook)
- **GPA 4.0/4.0 on university-level courses on mathematics**
- **Took advanced courses:** “data mining [algorithms]”, “applied data science”, “probability and stochastic process”, and “computational statistics.” (GPA: 3.85)

## Education

### • University of Calgary

*PhD*

Alberta, Canada

*Graduation: September 2022 (expected)*

### • Sharif University of Technology

*SUT is ranked 1st among Iranian Universities in Science and Engineering*

Tehran, Iran

*2013 - 2015*

## Selected Achievements and Awards

- **Programming Contest (CCPC)** Alberta, Canada  
*Ranked 5th in Calgary Collegiate Programming Contest* 2022
- **Github Contributions** Canada  
*Top-5 contributor in two open-source libraries STUMPY and mlxtend* 2022
- **Gordon Lewis Hedberg Doctoral Scholarship** Alberta, Canada  
*Student with Excellent Grades* 2021
- **Deep Learning Certificates** Deeplearning.ai  
*Certificates: DL basics, hyperparameter tuning, CNN, ML project structure in DL* 2021
- **Ph.D. National Competition Award** Tehran, Iran  
*Ranked 1<sup>st</sup> among more than 1000 participants of PhD National Exam* 2016  
(Afterwards, I applied to Canada.)
- **M.Sc. National Competition Award** Tehran, Iran  
*Ranked 6<sup>th</sup> among more than 5000 participants of M.Sc. National Exam* 2013

## Employment

- **Research Assistant and Teaching Assistant** Albert, Canada  
*Faculty of Grad Studies (University of Calgary)* Current
- **Electrical Engineer** Tehran, Iran  
*MECO (MAPNA Group)* 2016-2017

## Voluntary Positions

- **Lecture Lead and Mentor in Python programming** Alberta, Canada  
*Schulich Ignite, University of Calgary* Winter 2022- Summer 2022
- **Vice President of Grad Students** Alberta, Canada  
*Department of Electrical and Software Engineering* 2017-2019
- **Evaluator** Alberta, Canada  
*IEEE award committee, Graduate Student Association* 2017-2018

## Soft Skills

Self-learning, problem-solving, and articulate in technical subjects

## Extra-curricular Activities

Playing chess, listening to piano music, and reading philosophical books