

# Nima (Ross) Sarajpoor

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

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

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## Highlights (hyperlinks included)

### • Machine Learning

- **Experienced with several libraries in Python:** TensorFlow, Scikit-learn, Numpy, Pandas, and Numba.
- **Experienced with supervised and unsupervised machine learning models** (see IEEE journal papers 1 and 2)
- **Developed support for feature group in the machine learning library MLXTEND** to enhance feature selection module, particularly for categorical data (see CHANGELOG)
- **Implemented arbitrary-length anomaly detection algorithm** while reducing its computing time by providing a warm start (see MERLIN)
- **Developed a major feature in STUMPY library to support top-k neighbors in matrix profile algorithm** (see PR#595 and PR#586)
- **Created RandomForestExplorer** package to extract frequent rules from decision paths of RF
- **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**
- Experienced with **Shell scripting**
- Experienced with **SQL**

### • 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** Alberta, Canada  
*PhD, Dept. of Electrical and Software Engineering* *Graduation: Dec 2022 (expected)*
- **Sharif University of Technology** Tehran, Iran  
*SUT is ranked 1st among Iranian Universities in Science and Engineering* *2013 - 2015*

## Selected Achievements and Awards

- **Programming Contest (CCPC)** Alberta, Canada  
*Ranked 5th in Calgary Collegiate Programming Contest* *2022*
- **Github Contributions** Canada  
*Top 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

- **Data Scientist** Toronto, Canada  
*Manulife Financial Corporation* *Current*
- **Research Assistant and Teaching Assistant** Albert, Canada  
*Faculty of Grad Studies (University of Calgary)* *2017-2022*
- **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