

# Neda Shokraneh

COMPUTER SCIENCE PHD STUDENT

Simon Fraser University, 8888 University Drive, Burnaby BC, Canada, V5A 1S6

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## Education

### SFU(Simon Fraser University)

Canada, BC, Burnaby

P.H.D. IN COMPUTER SCIENCE

Jan. 2021 - present

- GPA: 4 out of 4.33
- Selected Courses:  
Graph Representation Learning.

### SFU(Simon Fraser University)

Canada, BC, Burnaby

M.S. IN COMPUTER SCIENCE (JOINT WITH BIOINFORMATICS PROGRAM)

Sep. 2018 - Dec. 2020

- GPA: 3.96 out of 4.33
- Selected Courses:  
Statistical Machine Learning, Machine Learning, Approx and Random Algorithms, Bioinformatics Algorithms, Graph Neural Network, Problem based learning Bioinformatics, Special Topics in Bioinformatics.

### SUT(Sharif University of Technology)

Iran, Tehran

B.S. IN COMPUTER HARDWARE ENGINEERING (MINOR IN MATHEMATICAL SCIENCES)

Sep. 2013 - Feb. 2018

- GPA: 16.68 out of 20
- Selected Courses:  
Engineering Probability and Statistics , Statistics and Applications, Topics in Statistics(Graduate), Topics in Combinatorics (Graduate), Data Analysis, Algebra1, Artificial Intelligence, Numerical Computation, Signals Processing.

## Research Interests

- Statistical inference
- Computational Biology
- Graph Representation Learning
- Dimensionality Reduction

## Experience

### Comp bio Lab, Simon Fraser University

Burnaby, BC, Canada

RESEARCHER UNDER SUPERVISION OF PROF. MAXWELL LIBBRECHT

Sep. 2018 - Present

### NLP group, Borealis AI

Toronto, ON, Canada

MACHINE LEARNING RESEARCHER

Jan. 2021 - Apr. 2021

- I was working on comparing sequence generation and sequence editing models for the text editing task, sentence simplification, where the output sequence is highly overlapped with the input sequence.

### Lupien Lab, Princess Margaret Cancer Centre/University Health Network

Toronto, ON, Canada

RESEARCH INTERN IN MATHIEU LUPIEN RESEARCH LABORATORY

May. 2019 - July. 2019

- I was working on enhancing resolution of prostate cancer sample Hi-C data from experiments with shallow sequencing using deep learning methods.

### Digital Media Lab, Sharif University of Technology

Tehran, Iran

RESEARCHER (B.S THESIS) UNDER SUPERVISION OF PROF. HAMID R RABIEE

Dec. 2016 - Feb. 2018

- I did some downstream analysis for Hi-C data such as identifying TADs and promoter-enhancer interactions. I did research on different existing methods, and applied them on our data to find significant interactions.

### Teaching Assistant

Tehran, Iran

SHARIF UNIVERSITY OF TECHNOLOGY

Fall 2014 - Fall 2017

C Language Programming (Fall 2014), Computer Architecture (Fall 2015, Spring 2017), Probability and Statistics (Fall 2016, Spring 2018), Computer Networks (Fall 2017), Computer Structure and Languages (Fall 2017)

## Paper referee

COMP BIO LAB, SIMON FRASER UNIVERSITY

- Reviewed paper for NeurIPS (2020,2021), ISMB (2021,2022), MLCB (2019)

*Burnaby, BC, Canada*

*2019 - Present*

## Publications and Preprints

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- Integrative chromatin domain annotation through graph embedding of Hi-C data [bioRxiv]  
Neda Shokrane, Mariam Arab and Maxwell W Libbrecht
- Continuous chromatin state feature annotation of the human epigenome [Bioinformatics, 2022]  
Habib Daneshpajouh, Bowen Chen, Neda Shokrane, Shohre Masoumi, Kay C Wiese and Maxwell W Libbrecht

## Skills

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**Programming Languages** Python, R, C++  
**Scripting Languages** Bash  
**Languages** Persian (Native), English (Fluent)

## Honors & Awards

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- 2021 , Special Grad Entrance School from Simon Fraser University
- 2018 , NSERC-CREATE scholarship award (Fully funded scholarship for the first year of master's joint program in Bioinformatics)

*Vancouver, BC,  
Canada*

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