# Sina Bahrasemani

Data Scientist . Machine Learning Expert . Computational Physicist

Experienced Data Scientist, Computational Physicist, and Researcher with a strong background of working in large international collaborations like ATLAS Experiment at CERN; Highly skilled in Data Analysis, Big Data, Machine Learning, and Python/C++ Programming languages.

# Experience

2016-2019

# Analysis Leader

 $CERN\ \mathcal{E}\ Simon\ Fraser\ University$ 

Acting as the main analysis leader in searching for rare physics phenomena through Petabytes of proton-proton collision data recoded by the ATLAS experiment

2014-2019

## Software Developer

CERN & Simon Fraser University

- Data wrangling, engineering and warehousing
- $\bullet\,$  Developing and maintaining analysis software in C/C++ and Python

2014-2019

## Machine Learning Expert

CERN & Simon Fraser University

- Developing sophisticated Machine Learning software for estimating properties of elementary particles
- Designing Boosted Decision Trees and Neural Networks
- Great experience of working with Scikit-learn, TensorFlow, TMVA and other ML libraries.

2015 – 2017

## Lecture Designer

Air Tutors

Designing university level online courses in Physics and Mathematics

2014-2019

## Teaching Assistant

 $Simon\ Fraser\ University$ 

Running variety of undergraduate tutorials and assisting instructors

# Education

2014–2019 Ph.D in Experimental Particle Physics

Simon Fraser University (supervisor: Prof. Dugan O'Neil)

2011–2014 | Master's Degree in Theoretical Physics

Sharif University of Technology

2007–2011 Bachelor's Degree in Physics

Shiraz University

## Education

# Relevant Courses

- Algorithms Specialization @StanfordX
- Python Programming @ MITX
- C/C++ Programming @ HarvardX & MicrosoftX

2015-2019

- Foundations of Data Analysis @ AustinX
- Machine Learning @ StanfordX & SFU
- Deep Learning @ MicrosoftX
- Deep Learning with Tensorflow @ IBM

### **Contact Details**

Address: Burnaby, BC, CA

Phone: 604-782-3734 Email: sbahrase@sfu.ca

LinkedIn

Google Scholar

Gitlab

#### **Professional Skills**

Data Analysis

Machine Learning

Software Development

Computational Physics

Distributed Computing

## **Programming**

Python C/C++ SQL/MySQL/Excel  $Apache\ Spark$  R/Matlab

#### Personal Skills

Problem Solving
Hardworking
Punctual
Self-Motivated
Initiative
Organized

#### Interests

Data Science

Machine Learning

Deep Learning

Software Engineering

Quantum Computing

Computational Physics