Özer Özdal

Contact Information

Tel: +1 438 935 74 64
ozerozdal@gmail.com
linkedin://ozerozdal
github://oozdal

Personal Information

•Date of birth
28/05/1990
•Place of birth
Izmir, Turkey

Languages

Native Turkish
Advanced English
French (A2 Level)

Software Skills

Monte Carlo Sampling
Statistical Modeling
Linear regression
Clustering
Quantitative Analysis
Data Visualization

Coursework

•Machine Learning
•Deep Learning Specialization
•SQL for Data Science
•Linear Algebra
•Multivariate Calculus
•Probability Theory
•Computational Physics
•Classical Mechanics
•Quantum Mechanics
•Statistical Mechanics

Tools

Python, C++
SQL, Fortran
CERN ROOT, LaTeX
Bash shell scripting
Mathematica, Matlab

Packages

Scikit-Learn,
NumPy, SciPy,
Pandas, Matplotlib,
Pytorch, TensorFlow

Data Science Experience

since 2018 **Machine Learning in High-Energy Physics** Concordia University
My goal is to compare two D dimensional samples: the SM simulated events (background to BSM searches), and the real data, and to check if the two are drawn from the same probability density distribution.

Education

2016–2020 **Ph.D. in Theoretical High Energy Physics** Concordia University
Phenomenology of new physics beyond the Standard Model: signals of dark matter and new gauge bosons at colliders. Lead to five scientific publications.

2016–2017 **Inter-University Transfer Student** McGill University
Took two graduate courses: Quantum Field Theory I - II

2014–2016 **M.Sc. in Theoretical High Energy Physics** Izmir Institute of Technology
The Higgs boson and right-handed neutrinos in supersymmetric models. Lead to two scientific publications.

2009–2014 **B.Sc. in Physics (Ranked 3rd)** Izmir Institute of Technology
Revisited N-symmetric barrier tunneling in Quantum Mechanics

Experience

2016–2020 **Research Assistant (RA)** Concordia University
Mariana Frank Research Group

2019-2020 **Visiting Ph.D. Student** NExT Institute & University of Southampton
Supported by MITACS Globalink Research Award. Lead to two scientific publications.

2016-2020 **Teaching Assistant (TA)** Concordia University
TAed for 8 physics courses. Graded assignments and wrote solutions, lead office hours and tutorial sessions.

2015–2016 **Research Assistant (RA)** TUBITAK
Studied muon anomalous magnetic moment and yukawa quasi-unification in supersymmetric Models. Lead to two scientific publications.

2012–2012 **Internship** Koç University, Mechanical Characterization Lab
Created vibration modeling in nanowire resonators with mechanical coupling

Relevant Accomplishments

- 7 peer-reviewed scientific publications in High Energy Physics
- Gave 17 talks about my research at conferences
- Awarded Globalink Research Award by MITACS and Graduate Student Mobility Award by Concordia University
- Attended 18 scientific workshops, summer/winter schools in top institutions
- Awarded by Concordia International Tuition Award of Excellence
- B.Sc. in Physics 3rd Ranked Award