Özer Özdal

Contact Information

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

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

2020– **Postdoctoral Researcher**   Concordia University

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
- Attended 18 scientific workshops, summer/winter schools in top institutions
- B.Sc. in Physics 3rd Ranked Award