yossofeshaq

data scientist

contact

3819 Country Club Dr. #301
Los Angeles, CA 90019
United States

+1 (503) 502 5276

yossofeshaq@gmail.com

languages

english mother tongue
farsi & french fluency

programming

♥ Python
R, C++, SQL, ROOT, Condor, Hadoop, LaTeX

education

2008–2014 **Ph.D, M.A.** of Physics — University of Rochester
Search for New Physics in All-hadronic Events with AlphaT in 8 TeV Data with CMS
This thesis describes a search I conducted for supersymmety in physics collision at the Large Hadron Collider by employing various data analysis techniques

2003–2007 **Bachelor** of Physics — The University of California, San Diego
Specialization in Astrophysics

experience

Feb. 2015 - **KEE Consulting** — Los Angeles, CA
Data Scientist
Co-founder of a small consulting firm providing business solutions through data analysis.

- Serve as lead contact to a +20M/year national surety company
- Assessed data infrastructure and developed opportunities for client
- Developed a random forest model ranking insuree risk variables
- Built a linear regression model optimizing agent performance

2009–2014 **CERN** — Geneva, Switzerland
Graduate Research in Particle Physics
In the 4+ years at CERN, I conducted experimental searches for new physics, performed measurements for the collaboration, and participated in the operation of the Compact Muon Solenoid detector.

- Search for Supersymmetry
  - used complex data analysis to isolate extremely rare signal in Terabytes of data
    - developed linear models and multivariate analyses
    - constructed likelihood models
    - hypothesis testing: CLs, Profile-Likelihood
  - integral part of fast-paced analysis group
  - contributed to the discovery of the Higgs Boson ✌
- Detector Operation
  - frequently coordinated a group of ∼15 physicist and engineers
  - represented sub-detector group in daily meetings
  - organized, chaired and presented in weekly meetings

2008 **Alameda Applied Sciences Corp** — Alameda, California
Summer Research
Applied research in plasma pulse-power technology

- Worked with project leader to optimize neutron output
- Was offered full-time extension

2007–2008 **Kaplan Co.** San Diego, California
Teacher

- Responsible to teach various Kaplan SAT methods to 20+ students
- Passed intensive training including a required 90th+ percentile score on diagnostic test to become teacher
- Received outstanding evaluations from students and teacher

2006–2008 **UCSD Mechanical and Aerospace Engineering Dept.** San Diego, California
Research Assistant

- Integral part of small group dedicated to the research of plasma dynamics.
- Responsible for running experiments, analyzing data, presenting results, and helping publish.
- Selected to help conduct a three week experiment in Imperial College, London, UK

activities and Awards

- Ranked 2nd in graduate teacher assistant evaluations
- "Research scholar award for outstanding academic achievement in the presentation of a scholarly paper at the 20th annual UCSD Undergraduate Research Conference"
- "Outstanding Poster Award at 8th annual Engineer Undergrad Research Konference Assembly"

skills

complex data analysis, data modeling, regular expression, scripting, linux

interests

professional: physics problems, data analysis **personal:** treasure hunting, chess, running, dancing

publications

thesis

Search for New Physics in All-hadronic Events with AlphaT in 8 TeV Data with CMS
Yossof Eshaq, Aran Garcia-Bellido
Presented 05 Dec, 2014

article in peer-reviewed journal

Search for supersymmetery in final states with missing transverse energy and 0, 1, 2, or $\geq$3 b-quark jets in 7 TeV pp collisions using the α_T variable
S. Chatrchyan
JHEP *01 (2013) p. 077. 2013*

Search for supersymmetry in hadronic final states with missing transverse energy using the variables α_T and b-quark multiplicity in pp collisions at $\sqrt{s} = 8\ TeV$
S. Chatrchyan
The European Physical Journal C *73.9, 2568 (2013). Springer Berlin Heidelberg, 2013*