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Education

Harvard University, Massachusetts, MA
Ph.D., Physics, expected 2018; M.A., Physics, 2014

California Institute of Technology, California, CA
B.A. with honors, Physics, 2012

Research Experience

Harvard University

Optimize signal selection using Machine Learning Algorithms ($W^\pm W^\pm W^\mp$)	2017-present
Search for signal in large, multi-dimensional backgrounds (di-Higgs $\rightarrow b\bar{b}b\bar{b}$)	2015-present
Improve Hough Transform in data preselection (Muon reconstruction)	2015-2016
Design and write monitoring software for reconstruction algorithms (Muon)	2015-2016
Organize and monitor data quality (Muon offline)	2015
Prospective study using boosted decision trees (di-Higgs $\rightarrow WW\tau\tau$)	2014
Calibration of prototype detector chambers (Micromegas)	2014
Evaluate detector reconstruction performance (Muon Segment)	2012-2013

California Institute of Technology

Analyze higher order behaviors in high energy physics data (W/Z + jets)	2011-2012
Design and validate an optical sensor under different thermal conditions	2009-2010
Design, conduct and analyze a double auction convergence experiment	2009-2010
Test novel methods of space launching	2008-2009

Teaching Experience

Harvard Teaching Fellow, PhySci 12, Electromagnetism, Qscore 4.55/5	2017
Harvard Teaching Fellow, Physics 125, Widely Applied Physics, Qscore 4.33/5	2014
Harvard Teaching Fellow, Physics 16, Mechanics & Relativity, Qscore 4.47/5	2013
Caltech Teaching Assistant, Physics 50, Physics League	2011-2012

Languages and Programming Skills

Chinese (native), English (proficient), French (elementary)
C++, HTML, L^AT_EX, Matlab, Mathematica, Python, ROOT