

James R. Castle

CONTACT INFORMATION	151 S Locust Hill Dr. Apt. 1104 Lexington, KY 40517	<i>Mobile:</i> (513) 390-2634 <i>E-mail:</i> jrcastle90@gmail.com <i>Webpage:</i> www.drjcastle.com <i>LinkedIn:</i> linkedin.com/in/jrcastle90
SUMMARY	<ul style="list-style-type: none">• 5+ years of experience in Big Data analytics at the European Organization for Nuclear Research Large Hadron Collider (CERN LHC)• Example analysis projects can be found at https://github.com/jrcastle• Skilled in multiple programming/scripting languages, including C++ and python	
EDUCATION	University of Kansas , Lawrence, KS Ph.D. in Physics	2017
	Northern Kentucky University , Highland Heights, KY B.S. in Physics and Mathematics	2012
PROFESSIONAL EXPERIENCE	Graduate Research Assistant	2013–present
	Physics and Astronomy Department, University of Kansas <ul style="list-style-type: none">• Formulated original scientific research that led to 1 conference presentation and peer-reviewed publication• Spearheaded and deployed autonomous data-driven calibration workflows, which have vastly improved the quality of 4+ petabytes of data collected at the CERN LHC, used for analyses resulting in 10+ publications• Successfully mentored next-generation researchers to operate and maintain calibration workflows for future data acquisition• Contributed to novel software development cycles of the open-source Compact Muon Solenoid Software project at https://github.com/cms-sw/cmssw	
	Graduate Teaching Assistant	2012–2013
	Physics and Astronomy Department, University of Kansas <ul style="list-style-type: none">• Instructed three introductory physics lab sections per semester• Volunteered to provide weekly recitation sections for students struggling with the course material	
TECHNICAL SKILLS	Statistical Analysis: Unfolding/deconvolution, hypothesis testing, Monte-Carlo simulation, multivariate analysis Machine Learning: Supervised learning, regularized linear/logistic regression, neural networks Programming/Scripting Languages: C++, Python, Unix/Linux shell, Mathematica, MATLAB, Octave Source Control Systems: Git, SVN Databases: SQL Applications: L ^A T _E X, Microsoft Excel, Microsoft PowerPoint Operating Systems: OS X, Unix/Linux, Windows	
HONORS AND AWARDS	Honors distinction in final Ph.D. defense, University of Kansas	2017
	Honors distinction in Ph.D. candidacy exam, University of Kansas	2015
	Outstanding Graduate Teaching Assistant, University of Kansas	2013
	Outstanding Senior in Physics, Northern Kentucky University	2012
	Outstanding Senior in Mathematics, Northern Kentucky University	2012
	Greaves Undergraduate Research Fellowship, Northern Kentucky University	2010