Clark Casarella

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SUMMARY OF QUALIFICATIONS

- Analytical skills: 5+ years experience working on the collection and analysis of large data sets using statistical methods, utilized and designed algorithms for data analysis and interpretation over a broad range of programming languages.
- Communication skills: 4+ conference appearances to brief international science community on analysis results, with 7+ years of individual and group physics and math teaching experience.
- Writing skills: co-authored multiple scientific papers published in top nuclear physics journals, with 2 first author works on my research. Created training manuals for various software/analysis packages for less-experienced graduate students inside my research group.

EDUCATION

University of Notre Dame, Notre Dame, IN Doctor of Philosophy, Nuclear Physics

October 2016

University of Notre Dame, Notre Dame, IN Master of Science, Physics

December 2014

University of North Georgia, Dahlonega, GA Bachelor of Science, Physics

May 2011

PROFESSIONAL EXPERIENCE

University of Notre Dame, Notre Dame, IN Graduate Student Researcher, 2011 - 2016

- Performed detailed quantitative analysis of large, event-based data sets using Mathematica, FORTRAN77 codes, and custom Python3 scripts, resulting in 2 first author and 2 co-authored publications in Physical Review C.
- Prepared focused, concise summaries of key qualitative results and interpretation of quantitative analysis. Presented both preliminary and final results at national-level scientific conferences to experts in nuclear physics.
- Implemented schedules and techniques to ensure efficient data analysis across multiple experiments.

Private Math & Nuclear Physics Tutor, Notre Dame, IN

2012-2015

- Tutored a wide array of high-school level mathematics (Trigonometry/Geometry, advanced Algebra) and undergraduate level Calculus to 4 students.
- Taught intermediate/basic nuclear physics materials and concepts for Medical Dosimetry Certification Board exam.

HONORS AND INTERESTS

- Outstanding Senior Physics Graduate, (University of North Georgia 2011)
- Lifelong PC gaming enthusiast, daily consumer of Twitch.tv products, audiophile quality sound recording/design