
Jason Bane

18 Morrison Ave. • Newport News, VA 23601
(931) 239-0611 • jbane@jlab.org

Education

- **University of Tennessee** **Knoxville, TN**
Ph.D. in Nuclear Physics *August 2012 – Planned December 2019*
 - **University of Tennessee** **Knoxville, TN**
Secondary Education Certification in Math and Science *August 2009 – May 2010*
 - **University of Tennessee** **Knoxville, TN**
Bachelor of Science, Physics & Minor in Education *August 2004 – May 2009*
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Experience

- **University of Tennessee, Department of Physics and Astronomy** **Knoxville, TN,**
Graduate Research Assistant *May 2014 – Present*
Supervisor - Nadia Fomin 865 974-1509
Hours: Full Time +40/week Salary: \$25,000
 - Designed and constructed front end electronics for an electron spectrometer.
 - Created module layouts and cable maps for efficient reuse of products.
 - Tested high voltage cards and laid high voltage cable for an electron spectrometer.
 - Used Oscilloscopes to test signals, debug logic modules, and map out inconsistent signals.
 - Maintained and refurbished individual detector components of a spectrometer including checking the quality of Photo Multiplier Tubes and plastic scintillators.
 - Calibrated detectors and used online analysis tools in Java to control the quality of data during an experiment.
 - Performed analysis on a large set of data involving multiple nuclear targets using Python, C++ , ROOT, and fortran.
 - Instructed new researchers on the use of hardware and software used in the field
- **University of Tennessee, Department of Physics and Astronomy** **Knoxville, TN,**
Graduate Teaching Assistant *August 2012 – May 2015*
Supervisor - James Parks 865 974-8952
Hours: +20/week Salary: \$20,000
 - Designed and implemented observational and planetarium based astronomy labs.
 - Educated students on the use of refracting telescopes and equatorial mounts.
 - Instructed students in laboratory exercises to help conceptualize physics topics.
 - Tutored students for homework assistance and test prep.

- **Clay County Tennessee Education Department**

Secondary Educator & Football Coach

Supervisor - John Denton

Hours: Full Time and Coaching +50/week

Celina, TN

August 2010 – May 2012

931 243-2340

Salary: \$34,000

- Created lesson plans that included interactive, creative thinking, and discussion driven curriculum for a diverse body of geometry students.
- Constructed lessons that used hands-on lab activities, demonstrations, and interactive computer lessons to instruct high school Juniors and Seniors in algebra-based physics.
- Used discussion-based problem-solving lessons to help remedial math students to improve their algebra, geometry and trigonometry skills for post-secondary education.
- Provided an equitable and inclusive atmosphere for diverse students.
- Math and reading focused tutoring.

Core Technical Skills

Hardware: Detector maintenance and wiring, front end electronics design and implementation, logical trigger design and testing

Languages: C, C++, L^AT_EX, Python, shell script, SQL

Software: Microsoft Office, Libre Office, Texstudio, vim, atom

Operating Systems: Linux(Red Hat), Windows, MacOS

Honors

- Jefferson Science Associates graduate fellowship award (2018)
- Chancellor's honors for extraordinary professional promise (2016)
- DOE Office of Science Graduate Student Research program award (2015)
- Dean's List 2009 Academic Year (2010)

References

Nadia Fomin, Professor

Department of Physics and Astronomy
University of Tennessee at Knoxville
(865) 974-1509, nfomin@utk.edu

Douglas Higinbotham, Staff Scientist

Jefferson Lab Accelerator Facility
(757) 584-7851, doug@jlab.edu

Evan McClellan, Post-doctoral Fellow

Jefferson Lab Accelerator Facility
randallm@jlab.org

Mellisa White, Teacher, Principal

Clay County Board of Education
millicentfiske@gmail.com

Interests

Football, coaching, programming, boating, traveling,