Samuel Fahey

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Data Scientist

Disciplined scientist with strong analytical skills and five years of experience performing data science for the Wisconsin IceCube Particle Astrophysics Center; leader of research teams in an international collaborative environment; self-directed with strong communication skills and vision for prioritization of tasks in complex projects; excited to share expertise and passion for data science with future employer

Education

University of Wisconsin – Madison | **Ph.D. in Physics (Dec. 2018); M.S. (Mar. 2017)**

Work experience:

- Designed novel analysis techniques that improve experimental efficiency by a factor of 20
- Reduced resource consumption from data processing by 90% using random forest regression
- Developed scripts and software for data analytics and implementation of statistical algorithms
- Discovered major systematic asymmetries with advanced and innovative data visualization techniques
- Presented results of statistical analysis at conferences in France, Germany, and USA
- Wrote technical reports for training of new staff and documentation of analytics tools
- Managed large, dynamic data sets; recognized nuance in features/distributions

University of Wisconsin – Eau Claire | **B.S. in Physics (May 2014) summa cum laude**

- Analyzed image sequences to measure asteroid properties
- Managed advanced electronics laboratory
- Conducted lab testing for geological engineering and biophysics experiments

Skills

Programming in Python (Scikit-learn, NumPy, SciPy, Matplotlib), C++, SQL, LaTeX; machine learning, mathematics and statistics, quantitative analysis, multivariate statistical analysis, predictive models, technical writing, data visualization, creativity and curiosity, public speaking, project leadership, critical thinking, problem-solving, can-do attitude, keeping up-to-date on advancements in field