**Jason A. Meziere**

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**Education**

*Brigham Young University – Idaho Rexburg, ID*

**Bachelor of Science in Physics**  *January 2017 – April 2020*

**Bachelor of Science in Mathematics**

**Minor in Computer Science**

**Minor in Statistics**

GPA: 3.75

**Educational Knowledge**

* **Programming**: Procedural & OOP, Complexities and Algorithms, Basic Machine Learning Algorithms, Data Structures
* **General Math**: Multivariable Calculus, Calculus of Variations, ODE’s, PDE’s, Linear Algebra, Discrete Math, Mathematical Proofs, Real & Complex Analysis, Statistical Methods, Abstract Algebra
* **Languages (best to worst)**: C++, Python, Mathematica, R, MATLAB, VBA, Lisp
* **General Computer**:Latex, Linux Command Line
* **Physics**: Electricity & Magnetism, Classical Mechanics, Statistical Mechanics, Quantum Mechanics, Nuclear & Particle Physics, Optics, Solid State Physics

**Research**

**Neural Network/Statistical Research** *August 2019 – Present*

* Investigating probabilistic nature of maching learning
* Comparing neural networks with common statistical methods

**Grain Boundary Research Team** *September 2017 – Present*

* Modeling grain boundary evolution with MOOSE (INL based application)
* Implementation of Calculus of Variations and Finite Element Method to solve PDE’s
* Function Parser in C++ with automatic differentiation capability

**Work/Volunteer Experience**

**Computational Materials Science Intern** *Idaho National Laboratory*

*Aug. 2019 - Present*

* Implemented matrix/vector operations to automatic differentiation (AD) system
* Research into tree comparison and canonization for use in AD system
* Worked with large codebase, implementing updates and additions
* Continuing research with Grain Boundary Research Team

**Infantry/Combat Arms** *U.S. Army*

*March 2011 – May 2014*

* Leader of fire team of 4 in high stress training situations
* Organized and distributed weapons for platoon of 30 soldiers

**Missionary** *The Church of Jesus Christ of Latter-Day Saints*

*December 2014 – December 2016*

* Oversaw well-being and instruction of other missionaries
* Worked with local members of the church to provide service to the community