

Jeffrey S. Keithley

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EDUCATION

- *Doctor of Philosophy in Computer Science* University of Iowa (Expected May 2026); 3.90/4.00 GPA
- *Bachelor of Science in Mathematics* New Mexico Tech (May 2020); (Presidential Scholarship and Tech Scholar designation) 3.91/4.00 GPA
- *High School Diploma* Southwest Aeronautics Mathematics and Science Academy (May 2016); 3.73/4.00 GPA

EXPERIENCE

University of Iowa 2021-present

- Research Assistant, performing research in:
 - Temporal vaccine allocation with respect to varying spatial scales
 - Online hospital room assignment to minimize infection spread between room clusters

Los Alamos National Laboratory 2019-present

- Post-Bachelors Researcher, performing research in:
 - Analysis and forecasting of COVID-19 hospitalizations
 - Modeling genetic patterns of migration for cholera spread
 - Modeling mosquito borne illness under climate change
- Computational Physics Student Summer Workshop (2020): Performed research in applying deep neural networks to photon and neutron transport simulation
- Parallel Computing Summer Research Internship (2019): Performed research in FORTRAN stencil kernel performance and collaborated with other project teams to generalize results

NMT CS and Math Department Positions 2017-2020

- Grader, TA, and tutor for a C programming class (2017)
- Grader for vector analysis and calculus III (2018, 2020)
- Teaching Assistant for calculus I (2019)

SKILLS

- Studied topics such as algorithms, optimization, machine learning, computational epidemiology, proof-based/numerical linear algebra, math modeling, numerical analysis, PDEs, and differential geometry.
- Proficient in C, Python, Linux, and L^AT_EX. Familiarity with FORTRAN, TensorFlow, Bash Scripting, Java, Matlab, Haskell, Alloy, and Parallel Computing.

COMMUNITY SERVICE

- *Civil Air Patrol*: Achieved Mitchell Award and placed in top 5% nationally for all service division in CyberPatriot 2015-2016
- Member of the Tau Beta Pi Honor Society NM Gamma Chapter
- Contributed over 500 hours volunteering at the New Mexico Museum of Natural History and Science
- Volunteered at Roadrunner Food Bank (Albuquerque, NM)