

# Tom Bryan

(503) 841-9612 · bryanptom@gmail.com

## EDUCATION

### Bachelor of Science: Applied and Computational Mathematics

Minors in Computer Science, Economics  
Brigham Young University

Apr 2022  
Provo, UT

- GPA: 3.9
- Relevant Coursework:
  - Math: Algorithms and Optimization, Linear Algebra, ODE, Real and Analysis
  - CS: Relational and NoSQL Databases, Java Development, Data Structures, Discrete Structures
  - Economics: Econometrics
- Proficient in: Python (esp. Pandas, Sklearn, Numpy, Matplotlib, Requests, Multiprocessing), Java, C++, STATA, Matlab
- University Endowed Scholarship

## EXPERIENCE

### Software Development Intern

*Sandia National Laboratory*

May 2020 – Present  
Livermore, CA

- Develop and debug computational modeling software in Java
- Worked with a team of engineers to create in-depth patches and extensive unit tests for legacy software projects with national security impacts
- Added features to optimization algorithm to expand parameters, weighting options, and results visualization.

### Research Assistant

*BYU Record Linking Lab*

Oct 2016-July 2017, Sep 2019-Present  
Provo, UT

- Engineered features and blocking strategies to algorithmically link historical records between large datasets, including national censuses and Social Security records.
- Developed, lead, and executed an in-depth study on relations between historical economic conditions and divorce rates in Utah and Nevada.
  - Created API and Web scraping tools to add over 10,000,000 records to and retrieve data from online databases.
  - Used recovered census data to create measures of family stability on county and state levels.
- Analyzed economic data to remove exogenous variation from the model.
- Designed and optimized algorithms to identify and classify tasks to improve user experience on FamilySearch.org.

### Software Development Intern

*Graphic Products, Inc*

June – August 2016  
Tigard, OR

- Created an automated JavaScript testing process for programs in development:
  - Wrote an interface to allow scripts to remotely control the main program's GUI.
  - Created a series of unit tests to verify functionality of each program element after a new commit.
- Completed language localization process for an internationally distributed software suite.

## VOLUNTEER EXPERIENCE

### Student Peer Mentor

▪ Tutored one-on-one with disadvantaged 6<sup>th</sup>-graders from nearby schools

Sep 2019-Present

### Full-Time Volunteer

- Worked full-time in the Philippines with a broad range of ecclesiastical and administrative duties.
- Organized and presented trainings for groups of 30-150 volunteers.
- Managed expenditures, receipts, and budget of 180-member organization.

Aug 2017-Aug 2019