

# Benjamin R. Hansen

## Project Experience

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### Team Lead

April 2020 – July 2020

- Supervised remotely a team of four in the evaluation and design of a class-wide mobile app interface
- Lead 1-hour meetings twice a week along with daily online communication ensuring project progress
- Played a vital part in achieving for five deliverables a class-average of 94.7%

### Research & Creative Works Conference

March 2020 – April 2020

- Investigated with Erlang a novel way to factor numbers, establishing a theorem and proof of its validity
- Presented research via a custom website with video explanation and mathematical equations in  $\text{\LaTeX}$

### Mathematica Model – Physics Project

March 2020 – April 2020

- Calculated light refraction indices of different liquids using Mathematica
- Prepared report through  $\text{\LaTeX}$  on mathematical findings

### Python Data Preparation

September 2019 – December 2019

- Developed over half the code in a team project of three to prepare dataset for machine learning

## Education

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### Bachelor of Science in Computer Science

Planned: July 2021

Brigham Young University – Idaho

Rexburg, ID

- **GPA:** 3.97
- Completed 6 semesters of math including biostatistics, calculus, and discrete mathematics
- Actively used Erlang for 3 semesters and C/C++ for 5 semesters

## Work Experience

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### Research Assistant

October 2018 – February 2020

University of Idaho in Idaho Falls

Remotely

- Researched application of new Azure Kinect DK camera
- Integrated C code with camera API to record body motion
- Reported each week on progress, including slide presentations

### Full-Stack Web Developer

September 2018 – December 2019

White Glove Construction

Remotely

- Headed ground-breaking development in new web service using PHP, JavaScript, and jQuery

### Computer Science Tutor

April 2018 – December 2019

Brigham Young University – Idaho

Rexburg, ID

- Taught 132 students (1,211 appointments) in C++, Erlang, Electrical Engineering, and Physics

### Teacher Assistant

September 2019 – December 2019

Brigham Young University – Idaho

Rexburg, ID

- Advised Discrete Mathematics class of 35 students in the study skills crucial to excel in the course
- Applied topics with Erlang, building for students an initial foundation of functional programming

## Skills

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- **Expert:**
  - Erlang (largest module: primes.erl, 1,563 lines; experience: 1½ years; total lines: 6,175)
  - C++ (largest program: bst.h, 1,569 lines; experience: 2½ years; total lines: 22,682)
  - VIM (2 years)
- **Proficient:** BASH/ZSH (total lines: 204), C, JavaScript, Python, R,  $\text{\LaTeX}$