

# Brandon Henke

## Curriculum Vitae

+1 (651) 315-6852  
brandon.henke3@gmail.com  
github.com/BrandonHenke

### Education

#### Academic Qualifications

- 2020 **BSc. Physics**, *University of Minnesota - Twin Cities*, Minneapolis, MN
- 2020 **BSc. Mathematics**, *University of Minnesota - Twin Cities*, Minneapolis, MN

### Employment History

- July **Graduate Assistant**, *Michigan State University*, East Lansing, MI
- 2020–Present As a part of the acceptance into graduate school, I was hired to be either a teaching assistant or a research assistant. A breakdown of my assignment each semester is as follows:
- Summer 2020 - Research Assistant under Dr. Huey-Wen Lin studying Lattice QCD.
  - Fall 2020 - Teaching Assistant for PHY251.
  - Spring 2021 - Teaching Assistant for PHY252.
  - Summer 2021 - Teaching Assistant for PHY251 and PHY252.
  - Fall 2021 - Research Assistant under Dr. Huey-Wen Lin studying Lattice QCD.
  - Spring 2022 - Research Assistant under Dr. Huey-Wen Lin studying Lattice QCD.
  - Summer 2022 - Research Assistant under Dr. Huey-Wen Lin studying Lattice QCD.
  - Fall 2022 - Teaching Assistant for PHY251.
  - Spring 2023 - Teaching Assistant (course unknown at this time).
- June **Technical Aide**, *3M*, Maplewood, MN
- 2017–May 2020 I was a lab assistant, responsible for making and testing samples for the different projects that were worked on.
- September **Teaching Assistant**, *University of Minnesota - Twin Cities*
- 2018–December I was a teaching assistant for introductory physics courses. I was responsible for running a lab and problem session. Grading, holding office hours, tutoring, and proctoring exams were all part of the duties outside of instructing the lab and problem sessions.
- 2019
- September **Teaching Assistant**, *University of Minnesota - Duluth*
- 2016–May 2017 I was a teaching assistant for introductory physics and math courses. I was responsible for assisting students during problem sessions, grading, and tutoring.

### Technical and Personal skills

**Programming Languages:** Proficient in: C++, Python, Matlab, Java, TeX

**Industry Software Skills:** Matlab (Advanced), Mathematica (Advanced), MS/Google Office Products (Advanced)

**Tutoring:** I am a nationally certified tutor in introductory physics and math courses.

### Interests and extra-curricular activity

**General Programming:** I like to program other projects, some of which can be found on my github. Most of these center around physics and math applications.

**Video Game Modding:** With the help of a friend, I've created a mod for minecraft that generates a maze using a loop-erased random walk algorithm.

**Other:** I like to learn foreign languages and linguistics. I am not at a speaking level for any language besides English, but I've learned some basics of French, Italian, Latin, Spanish, Greek (very basic), and Japanese (rusty).

### Publications

- [1] Giovanni Pederiva, Alexei Bazavov, Brandon Henke, Leon Hostetler, Dean Lee, Huey-Wen Lin, and Andrea Shindler. Quantum state preparation for the schwinger model, 2021.