# Huân Q. Bùi

Colby College, 8347 Mayflower Hill, Waterville, ME, 04901 hqbui21@colby.edu | huanqbui.com | **in** | 301-704-6958

### Education

**B.A.** (anticipated) Colby College, 2017—2021, GPA: 4.12/4.00

Physics & Mathematical Sciences with a Concentration in Statistics.

#### Courses

**Physics** Classical Field Theory (*independent study*), General Relativity, Classical Mechanics,

Thermodynamics & Statistical Mechanics, Modern Physics.

Mathematics Matrix Analysis, Linear Algebra, Probability Theory, ODE, PDE, Statistical Modeling,

Vector Calculus, Introduction to Statistics, Honors Calculus, Introduction to Python.

## Work Experience

Undergraduate Researcher, Joint Quantum Institute—UMD & NIST

Summer 2019

- Principal investigator: Steven Rolston.
- Unofficial offer accepted. Topic: Optical nanofiber (ONF) experiments.

## Research Assistant, Colby College, Dept. of Physics & Astronomy

Nov 2017—Present

- Principal investigator: Professor Charles Conover.
- Precision measurements of millimeter-wave transitions between Rydberg state in potassium.
- Summer 2018: Applied Ramsey SOF method to current apparatus for precision measurements.
- Work presented at CUSRR 2018.

## **Teaching Assistant**, Colby College, Dept. of Mathematics & Statistics

Feb 2019—Present

- Grade problem sets for MA253: Linear Algebra. Instructor: Otto K. Bretscher.
- Hold TA hours.

## **Teaching Assistant**, Colby College, Dept. of Physics & Astronomy

Sep 2017—Present

- Graded problem sets for Mechanics, E&M and Optics ('18), and Modern Physics I & II ('19).
- Prepared laboratory equipment for Foundations in Electromagnetism & Optics.

## Math & Physics Tutor, Colby College, Dean of Studies

Nov 2018—Present

- Meet 5 students from Modern Physics, Mechanics, and First-year Calculus on a regular basis.
- Help improve their academic performance through reviewing course material and solving problems.

# Tech Support, Colby College ITS

Aug 2017—Sep 2018

- $\bullet$  Troubleshot class room equipment, hard/software, and networking problems.
- Provided help to students, staff, and faculty both over the phone and in person.

### Honors & Awards

Bixler Scholar, Colby College: 2017—2018 Dean's List, Colby College: F'17, S'18, F'18

# Skills

Laboratory Optics, atomic spectroscopy (collecting and analyzing data), constructing ECDL's and

electronic laser frequency-locking circuits, operating diode lasers & magneto-optical

traps, programming arbitrary waveform generator.

Computing IGOR Pro (programming, analysis & modeling), R, Python, Mathematica, LATEX, Adobe

Illustrator, Ubuntu, Windows, MacOS, C++ (beginner), HTML & CSS (novice).

**Tutoring** Online & One-on-one

**Languages** Vietnamese (native), English (fluent/proficient)

# Conferences

DAMOP19 Millimeter-wave precision spectroscopy of d-d transitions in potassium Rydberg states

# Interests/Activities

Colby Ultimate Frisbee (Dazzlin' Asses)