

Huân Q. Bui

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Education

B.A. (*anticipated*) *Colby College*, 2017—2021, GPA: 4.12/4.00
Majors: Physics & Mathematics. Minor: Statistics

Courses

Physics Classical Field Theory (*independent study*), General Relativity, Classical Mechanics, Thermodynamics & Statistical Mechanics, Special Relativity & Quantum Physics.
Mathematics Matrix Analysis, Linear Algebra, Probability Theory, Ordinary & Partial Differential Equations, Vector Calculus, Honors Calculus.
Statistics Applied Longitudinal Data Analysis, Statistical Modeling, Introduction to Statistics.

Work Experience

Undergraduate Researcher, *Joint Quantum Institute—UMD & NIST* Summer 2019
• Principal investigator: Steven Rolston.
• Topic: Experiments with Optical Nanofiber (ONF).
Research Assistant, *Colby College, Dept. of Physics & Astronomy* Nov 2017—Present
• Principal investigator: Charles Conover.
• Topic: Studying Rydberg ^{39}K in a MOT using frequency-stabilized external-cavity diode lasers.
• Current interest: Electromagnetically-Induced Transparency experiments.
Teaching Assistant, *Colby College, Dept. of Mathematics & Statistics* Feb 2019—Present
• Instructor: Otto K. Bretscher. Course: Linear Algebra.
• Grade problem sets and conduct weekly study sessions.
Teaching Assistant, *Colby College, Dept. of Physics & Astronomy* Sep 2017—Present
• Instructor: Robert Bluhm. Course: Modern Physics II. Grade weekly problem sets.
• Past courses: Mechanics, E&M and Optics, and Modern Physics I.
• Prepared laboratory equipment for E&M and 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.
• Provide academic assistance through reviewing course material and solving problems.
Tech Support, *Colby College ITS* Aug 2017—Sep 2018
• Troubleshoot classroom equipment, hard/software, and networking problems.
• Provided help to students, staff, and faculty both over the phone and in person.
Tutor, *7AStar Tutoring* Summer 2017
• Assisted Vietnamese high school students with the SAT Subject and AP tests.

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, L^AT_EX, 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
CLAS 2019 Matrices and Error Correction in Coding Theory (*anticipated*)
CUSRR2018 Precision measurement of potassium energy levels at highly excited states