

Huan Q. Bui

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Education

B.A. (*anticipated*) Colby College, 2017—2021, GPA: 4.14/4.00
Majors: Physics & Mathematics. *Minor:* Statistics

Relevant Coursework

Physics	Classical Field Theory (<i>independent study</i>), Quantum Mechanics, General Relativity, Classical Mechanics, Electricity & Magnetism, Thermodynamics & Statistical Mechanics, Special Relativity & Quantum Physics.
Mathematics	Matrix Analysis, Linear Algebra, Probability Theory, Ordinary & Partial Differential Equations, Abstract Algebra, Complex Analysis, Finite Fields & Error Correcting Codes, Vector Calculus, Honors Calculus.
Statistics	Applied Longitudinal Data Analysis, Statistical Modeling, Introduction to Statistics.

Work Experience

Undergraduate Research Assistant , <i>Joint Quantum Institute—UMD & NIST</i>	Summer 2019
<ul style="list-style-type: none">• Principal investigator: Steven Rolston.• Topic: Experiments with Optical Nanofiber (ONF).	
Research Assistant , <i>Colby College, Dept. of Physics & Astronomy</i>	Nov 2017—Present
<ul style="list-style-type: none">• Principal investigator: Charles Conover.• Topic: Ultracold Rydberg ^{39}K in a MOT under frequency-stabilized external-cavity diode lasers.	
Teaching Assistant , <i>Colby College, Dept. of Mathematics & Statistics</i>	Feb 2019—Present
<ul style="list-style-type: none">• Current course: Ordinary Differential Equations. Past course: Linear Algebra.• Grade problem sets and conduct weekly study sessions.	
Teaching Assistant , <i>Colby College, Dept. of Physics & Astronomy</i>	Sep 2017—Present
<ul style="list-style-type: none">• Current courses: Modern Physics. Past course: Intro to Mechanics, E&M and Optics.• Grade weekly problem sets. Prepared laboratory equipment for E&M and Optics.	
Math & Physics Tutor , <i>Colby College, Dean of Studies</i>	Nov 2018—Present
<ul style="list-style-type: none">• Meet students from Modern Physics, Mechanics, and First-year Calculus on a regular basis.• Provide academic assistance through reviewing course material and solving problems.	

Honors & Awards

Bixler Scholar	<i>Colby College</i> , S'18—
Dean's List	<i>Colby College</i> , F'17, S'18, F'18, S'19
Meritorious Winner	<i>COMAP</i> Mathematical Contest in Modeling, 2019.

Skills

Laboratory	Optics, atomic spectroscopy, constructing ECDL's and electronic laser frequency-locking circuits, operating diode lasers & magneto-optical traps, programming arbitrary waveform generators.
Computing	IGOR Pro (programming, analysis & modeling), R, Python, Mathematica, \LaTeX , Adobe Illustrator, RawTherapee, C++ (beginner), HTML & CSS (novice).
Languages	Vietnamese (<i>native</i>), English (<i>fluent/proficient</i>)

Conferences/Presentations

DAMOP19	Millimeter-wave precision spectroscopy of d-d transitions in potassium Rydberg states
CLAS 2019	Matrices in Quantum Computing: A 2-qubit entanglement circuit
CUSRR2018	Precision measurement of potassium energy levels at highly excited states