

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, Quantum Mechanics, General Relativity, Classical Mechanics, Electromagnetism, Thermodynamics & Statistical Mechanics, Special Relativity & Quantum Physics
Mathematics	Matrix Analysis, Linear Algebra, Abstract Algebra, Probability, Ordinary & Partial Differential Equations, Complex Analysis, Finite Fields & Error Correcting Codes, Vector Calculus, Honors Calculus
Statistics	Applied Longitudinal Data Analysis, Statistical Modeling, Introduction to Statistics

Experience

Research Assistant , Joint Quantum Institute (JQI)—UMD & NIST	Jun 2019—Present
<ul style="list-style-type: none">Principal investigators: Steven Rolston & Hyok Sang Han (post-doc)Super- & sub-radiance and infinite-range interactions in ultracold rubidium near an optical nanofiberConstructing a standing-wave optical dipole trap for future nanofiber experimentsDeveloping an experimental control program with NI-DAQmx in Python	
Research Assistant , Colby College, Dept. of Physics & Astronomy	Nov 2017—Present
<ul style="list-style-type: none">Principal investigator: Charles Conover.Precision measurement experiments on ultracold potassium in Rydberg statesData acquisition & analysis, constructing frequency-stabilizer circuits & external-cavity diode lasersProgramming & controlling waveform generators for Ramsey spectroscopy and MOT fast field-switching	
Teaching Assistant , Colby College, Dept. of Mathematics & Statistics	Feb 2019—Present
<ul style="list-style-type: none">Current course: Ordinary Differential Equations. Past course: Linear AlgebraGrading problem sets and conducting weekly study sessions	
Teaching Assistant , Colby College, Dept. of Physics & Astronomy	Sep 2017—May 2019
<ul style="list-style-type: none">Past courses: Modern Physics, E&M and Optics, Intro to MechanicsGraded weekly problem sets; Prepared laboratory equipment for E&M and Optics	
Math & Physics Tutor , Colby College, Dean of Studies	Nov 2018—Present
<ul style="list-style-type: none">Meeting students from Modern Physics, Mechanics, and Calculus on a regular basisProviding academic assistance through reviewing course material and solving problems	
Tech Support , Colby College ITS	Aug 2017—Sep 2018
<ul style="list-style-type: none">Troubleshoot classroom equipment, hard/software, and networking problemsProvided help to students, staff, and faculty both over the phone and in person	
Tutor , 7AStar Tutoring	Jun 2017—Aug 2017
<ul style="list-style-type: none">Prepared Vietnamese high school students for the SAT Subject and AP tests	

Honors & Awards

Bixler Scholar	Colby College, S'18—
Dean's List	Colby College, F'17, S'18, F'18, S'19
Meritorious Winner	COMAP Mathematical Contest in Modeling, 201.

Skills

Physics	Quantum mechanics, optics, and information; Experimental atomic, molecular, and optical physics
Computing	IGOR Pro (programming, analysis & modeling), R, Python, Mathematica, \LaTeX , Adobe Illustrator, RawTherapee, MS Office, C++ (beginner), HTML & CSS (beginner)
Languages	Vietnamese (native), English (fluent/proficient)

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

Projects

Personal Website/Archive , huanqbui.com	Nov 2018
<ul style="list-style-type: none">A space for my notes from class and independent readings plus other works. Github repository	

Activities

Club Ultimate Frisbee	2016—Present
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