Huan Q. Bui

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Education

B.A. (*anticipated*) *Colby College*, 2017—2021, GPA: 4.12/4.00
Physics & Mathematical Sciences with a Concentration in Statistics

Work Experience

Research Assistant
Colby College, Physics
Nov 2017—Present

Project Investigator: Professor Charles Conover
Topic: High-precision measurements of millimeter-wave transitions between Rydberg states in potassium (to 1 in 10^7). Measurements are used to determine quantum defects and absolute energy of the Rydberg states. Summer 2018: Studied how to use Ramsey separated oscillatory fields method to make precision measurements with our current apparatus. Work presented at CUSRR 2018.

Teaching Assistant
Colby College, Physics
Nov 2017—Present

Grade weekly problem sets for: PH141: Foundations in Mechanics (F'17); PH145: Foundations in Electromagnetism & Optics (S'18); PH241: Modern Physics I (F'18). Prepared laboratory equipment for PH145 (S'18).

Math & Physics Tutor
Colby College
Nov 2018—Present

Meet 5 students individually from Modern Physics, Introduction to Mechanics, and First-year Calculus on a weekly basis, help improve their academic performance through reviewing course content and solving problems.

Computer Consultant
Colby College, ITS
Aug 2017—Oct 2018

Installed software; Supported students, staff, and faculty with troubleshooting classroom equipment, hard/software, and networking problems. Promoted from *Support Center Technician.*

Tutor, *7AStar Tutoring*
Summer 2017

Prepared Vietnamese high school students for standardized tests (e.g. AP exams and SAT subject tests).

Honors & Awards

Bixler Scholar Colby College, June 2018: Top-ranked students as determined by the cumulative academic record at the end of the preceding year.

Dean's List Colby College, Fall 2017, Spring 2018

Skills

Laboratory Optics, atomic spectroscopy (collecting and analyzing data), constructing electronic circuits, operating diode lasers & magneto-optical traps, programming arbitrary waveform generators for remote MOT current control & other purposes.

Computing IGOR Pro (programming, analysis & modeling), R, Python, Mathematica, LaTeX, Adobe Illustrator, Ubuntu, Windows, MacOS, C++ (novice), Java (novice), HTML (novice)

Tutoring Online & One-on-one tutoring

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

Courses

2017—2018 Classical Mechanics; Modern Physics; Linear Algebra; Honors Calculus; Intro to Python

2018—2019 General Relativity; Probability Theory; Ordinary Differential Equations; Vector Calculus; Introduction to Statistics; Matrix Analysis; Partial Differential Equations; Thermodynamics & Statistical Mechanics; Statistical Modeling; Classical Field Theory (*independent study*)

Extracurriculars

Colby Ultimate Frisbee (Dazzlin' Asses)