

Huong Vu

2116 Broadmore Ave, San Pablo, CA 94806 ♦ (510) 283-4279

huong_vu@ucberkeley.edu ♦ <https://github.com/hhhvu>

Research Interests

- Machine Learning, Deep Learning, TimeSeries, Optimization, Bayesian Inference, High-dimensional Statistics

Education

Ph.D. in Statistics 2020

University of California, Berkeley

B.S. in Mathematical Analytics and Operations Research 2016 - 2018

University of California, Davis - GPA: 3.986/4.00 – Highest Honor

Employment

Data Analyst (1-800 Radiator & A/C) July 2018 – March 2020

- Constructing and maintaining databases used in Inventory and Pricing projects using SQL
- Exploring and examining hidden patterns then reporting results to stakeholders in visual and written forms using R.
- Assisting in building statistical and machine learning models in Inventory and Pricing projects.
- Building reports and automating data/reports weekly updating processes using Python, SQL and VBA.

Tutor (Richmond Youthworks, California) September 2015 – May 2016

- Provided guidance and mentorship for students at underserved high school on homework and college/scholarship applications
- Organized social activities and volunteer events such as LEGO Robotics, tree planting with Ground Work, Inc., and a field trip to San Quentin State Prison

Peer-lead Team Leader (Contra Costa College, California) January 2014 – May 2016

- Tutored 100+ college students in math, physics, and chemistry and assisted them in reaching academic goals
- Cooperated with other leaders to organize learning workshops where 80+ students participated in engaging math exercise

Research Experience

Research Assistant (Statistics Department, University of California, Davis) June 2017 – June 2018

- Assisted Professor Alexander Aue in extracting and pre-processing California's catchments attributes and pesticide usages
- Explored methods to impute missing and censored data, analyzed using spatial and temporal models

Visiting Researcher (Muhlenberg College REU, Pennsylvania) June 2016 – August 2016

- Developed dynamic models for generating triples satisfied quadratic formulae based on Pythagorean triples; constructed winning strategies for Edge Removal Game on special graphs and expanded to Edge and/or Vertex Removal Game.
- Identified and generated integer sequences using the On-line Encyclopedia of Integer Sequences

Papers

- Nguyen, D. M. H., Nguyen, D. M., **Vu, H.**, Nguyen, B. T., Nunnari, F., Sonntag, D. (2020). Attention with Multiple Sources Knowledges for COVID-19 from CT Images. <https://arxiv.org/pdf/2009.11008.pdf>
- **Vu, H.**, Aue, A. (2018). Monitoring Pesticide Concentrations: Database Time Series Analysis. <https://aggregate.math.ucdavis.edu/files/1515/2886/0961/Thesis.pdf>
- Ediger, A., Moon, J., Mora, C., **Vu, H.**, Vukovich, D., Winkeler, Z., and Wong, L. (2016). Expansions on "A Game of Edge Removal on Graphs".
- Benjamin N., Winkler, Z., Arian, R., Jaramillo, E., Ohanian, G., **Vu, H.**, and Reyes, N. (2016). Pythagorean Triples.

Honors and Scholarships

- 2018: Highest Honor from Mathematics Department, University of California, Davis
- 2017: Yampol Egerman Scholarship

- 2016: Honors & Prizes Scholarship, Contra Costa College Mathematics Department Scholarship, Extended Opportunities Program and Service Transfer Scholarship
- 2015: Associated Students Union Leadership Scholarship, Sy & Beverly Scholarship, Contra Costa College Foundation General Scholarship
- 2014: Bernard Osher Scholarship

Leadership Activities

Vietnamese Teacher (San Pablo, California) August 2013 – present

- Teaching Vietnamese language and cultures to K-12
- Arranged cultural and festival events such as Lunar New Year or Full Moon Festival

President of Vietnamese Students Association (Contra Costa College) June 2015 - May 2016

- Introduced Vietnamese cultures and history to community by organizing Vietnamese Cultural Days or workshops
- Strengthen Vietnamese community unity by hosting team building activities such as study group session and field trips.

Vice President of Associated Students Union (Contra Costa College) June 2014 – May 2015

- Represented students' opinions in college's committee meetings related to students
- Organizing community's activities for benefits of students such as Club Rush and Spring Dance