

# Hubert Luo

[hubertluo@berkeley.edu](mailto:hubertluo@berkeley.edu)

[linkedin.com/in/hubertluo](https://www.linkedin.com/in/hubertluo) | [github.com/hLuo27](https://github.com/hLuo27)

## EDUCATION

University of California, Berkeley

May 2020

B.A. Mathematics, Statistics

GPA: 3.95, Dean's Honours List

Coursework: Multivariable Calculus, Linear Algebra, Probability Theory, Real Analysis, Computing with Data, Data Science, Statistical Theory Differential Equations, Graph Theory, Combinatorics, Number Theory, Structure and Interpretation of Computer Programs

## PROFESSIONAL EXPERIENCE

UC Berkeley Family and Culture Lab, *Undergraduate Researcher, Zhou Group: Kids and Family Project*

January 2017 – Present

- Design SPSS database and analyze longitudinal study data on risk and protective factors that impact childhood development
- Distribute, process, and evaluate 258 surveys using Qualtrics, Excel, and SPSS; lead Qualtrics team in online survey distribution

University of California, Berkeley, *Group Tutor, Statistics 134: Concepts of Probability*

January 2017 – Present

- Lead review sessions of course concepts/assignments; grade homework assignments; assist discussion sections and office hours

Student Learning Centre Tutor, *Math 54: Linear Algebra | Math 55: Discrete Mathematics*

August 2017 – December 2017

- Held office hours for 3 hours per week to answer questions and provide feedback about homework, quizzes, and exams

Academic Intern, *Computer Science 61A: Structure and Interpretation of Computer Programs*

January 2017 – May 2017

- Assisted students with Python/SQL labs and answered questions regarding homework and projects to reinforce concepts

Berkeley Statistics Students Association, *Data Consultant, Alameda County Food Bank Project*

September 2017 – December 2017

- Analyzed social, economic, and demographic datasets to conduct exploratory data analysis and identify areas in need of hunger alleviation services; created multivariable predictive model to predict pounds unmet by census tract using Python and R
- Created variety of data visualizations, i.e., choropleth maps, to present findings and investigate model accuracy using Tableau
- Conducted literature review, cleaned census data, and wrote final report and slides to present actionable suggestions

Ivy Global (Educational Consulting), *Math Content Development Intern*

June 2016 – August 2016

- Created 120 math practice test questions and answer explanations and uploaded 200 answer explanations online using LaTeX
- Developed company-wide LaTeX guide to boost consistency in coding style, save time when debugging, and streamline training

## LEADERSHIP EXPERIENCE

Berkeley Model United Nations, *Director of Organizational Partnerships*

September 2016 – Present

- Research, evaluate, and supervise partnerships with businesses across 5 continents to provide resources, information, and discounts to 2,000+ delegates at oldest and largest Model UN conference on the west coast of the United States
- Initiate and secure deals with airlines, hotels, transportation companies, and educational firms to provide discounted rates
- Manage team of 10 staff members to coordinate outreach efforts and identify potential partners in different industries

Co-Chair of UN Economic and Financial Committee

- Moderate debate between 400 delegates to boost student knowledge and understanding of contemporary world issues
- Discuss student progress with advisors, write case studies, grade research papers, and return delegate feedback after conference

Associated Students of the Univ. of California (Student Government), *International Affairs Coordinator*

August 2016 – May 2017

- Spearheaded organization and implementation of Visa and Career Planning Workshop for 100 international students
- Researched and planned cultural exchange events with 300 attendees to facilitate inter-cultural awareness and understanding

Northern Karate Schools, *Karate Instructor*

March 2013 – June 2016

- Directed karate lessons of up to 30 students; evaluated students' competency of karate kata, self-defense, weapons, and sparring

## PROJECTS

2016-17 NBA Statistics (R)

February 2018

- Applied bootstrap/jackknife resampling; calculated sample statistics, standard errors, correlations, and confidence intervals

National Pokédex Data Analysis (Python/Jupyter Notebook)

January 2018

- Simulated random sampling, cleaned datasets, and conducted exploratory data analysis, i.e., cross tabulations and grouping

Face Lattice of a Convex Polytope (Research Talk)

December 2017

- Gave a talk on face lattice of convex polytopes and how to completely characterize the combinatorial structure of a hypercube
- Participated in an independent reading project on convex polytopes, a field that combines combinatorics and graph theory

## SKILLS & INTERESTS

- **Technical Skills:** R, Python, Tableau, SAS, SQL, Jupyter Notebook, Excel, Qualtrics, SPSS, LaTeX, Markdown, Word
- **Language Skills:** English (native), Mandarin (fluent)
- **Interests:** Ice hockey, swimming, international relations