Hubert Luo

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EDUCATION

University of California, Berkeley — **May 2020**
B.A. Statistics, Applied Mathematics (Specialization: Data Science) — **GPA: 3.96**, Dean's Honours List
Coursework: Linear Modelling, AI, Data Science, Stochastic Processes, Linear/Abstract Algebra, Numerical/Real Analysis, Computing

TECHNICAL SKILLS

- **Programming Languages:** R, Python, MATLAB, Bash, LaTeX
- **Data Analytics Tools:** Tableau, Jupyter Notebook, Git, Excel, Markdown, Qualtrics

PROFESSIONAL EXPERIENCE

WellDone International (NGO) — **June 2018 – October 2018**
Data Science Intern — *San Francisco, CA*
- Train, apply, and evaluate machine learning models to improve well failure prediction accuracy by using alternative data sources
- Created extensive 30-page report that summarized methodology and findings for governments and aid organizations

Stark Research Group — **September 2018 – Present**
Undergraduate Researcher, Look Who's Talking Project — *Berkeley, CA*
- Review video-recorded faculty job talks to transcribe the number, nature, and duration of interruptions and questions
- Perform statistical analysis to quantify interruptions and test whether race and gender matter; help draft paper for publication

UC Berkeley Family and Culture Lab — **January 2017 – May 2018**
Undergraduate Researcher, Kids and Family Project — *Berkeley, CA*
- Design database and analyze longitudinal study data on risk and protective factors that impact childhood development
- Distribute, process, and evaluate 258 surveys using Qualtrics and Excel; lead Qualtrics team in online survey distribution

Berkeley Statistics Students Association — **September 2017 – December 2017**
Data Consultant, Alameda County Food Bank Project — *Berkeley, CA*
- Analyzed datasets to identify areas in need of hunger alleviation services; created model to predict pounds unmet by census tract
- Created data visualizations, wrote report, and created slides to communicate findings and develop distribution strategies

Ivy Global (Educational Consulting) — **June 2016 – August 2016**
Math Content Development Intern — *Toronto, ON*
- 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

PROJECTS

Neural Networks (Python) — **August 2018**
- Built neural networks from scratch to implement handwritten digit classification, language classification, and regression models
- Tuned hyperparameters to achieve 97.5% accuracy on digit classification and loss of 0.0077 on sine curve regression

Pacman Agent (Python) — **June/July 2018**
- Created collaborative agent that implemented A* search, minimax game trees, and reinforcement learning to play Pacman

Classifying Legendary Pokémon (R) — **May 2018**
- Developed classifier to predict whether a Pokémon is legendary with 98.8% accuracy using k-nearest neighbours algorithm

Location of Palindromes in DNA Sequence of Human Cytomegalovirus (R) — **March 2018**
- Tested goodness-of-fit of palindrome locations with model; wrote report with visualizations and tables to discuss results

LEADERSHIP & TEACHING EXPERIENCE

Berkeley Model United Nations — **September 2016 – Present**
Director of Organizational Partnerships — *Berkeley, CA*
- Negotiate deals to provide $5,000 discounts; moderate debate between 400 delegates to boost understanding of world issues

UC Berkeley – Data Science Department — **January 2017 – Present**
Group Tutor, Data 8: Foundations of Data Science — *Berkeley, CA*
- Lead review sessions, grade homework assignments, create tutoring worksheets, and hold office hours to reinforce key concepts

Associated Students of the University of California (Student Government) — **August 2016 – May 2017**
International Affairs Coordinator — *Berkeley, CA*
- Coordinated Visa and Career Planning Workshop for 100 students and cultural exchange events with 300 attendees

Interests: *Karate (2nd Degree Black Belt), hockey, swimming, 20th century history, international affairs, piano (Associate of the Royal Conservatory of Music)*