

Kenneth Lee

CONTACT INFORMATION

TVA#6117, 55-550 Naniloa Loop
Laie, HI 96762

honlee@ucdavis.edu
<https://kenneth-lee-ch.github.io>
www.linkedin.com/in/chinhongkennethlee

RESEARCH INTERESTS

Machine learning, high-dimensional statistics, casual inference, data mining, optimization.

EDUCATION

University of California, Davis

M.S. in Statistics

2019 - 2021

Brigham Young University—Hawaii

B.S. Mathematics, Computer Science

2014 - 2018

- Minors: Information Systems, Information Technology
- Honors Thesis: *An Evaluation of Blind Reconstruction Methods of the Dynamical Structure Functions*
- Advisor: Vasu Chetty
- GPA: 4.0/4.0

RESEARCH EXPERIENCE

Brigham Young University—Hawaii Institutional Research

Research Analyst Intern

Aug 2018 - Present

- *Data Visualization*: Built pipelines to update Tableau Server workbooks automatically from Quartics surveys.
- *Database Management*: Coordinated with the Enterprise Information System department at BYUH to establish a data warehouse to facilitate institutional research.
- *Data Cleaning*: Trained and supervised students workers on the data cleaning and visualization with R and Tableau.
- *Consulting*: Leveraged 11-year data from enrollment, degree completion, freshman cohort, and curriculum to conduct retention study for BYU—Hawaii President's council.
- Status: Part-Time
- Working hours: 27 hours per week
- Supervisor: Kathy Pulotu

Research Assistant Supervisor

Sept 2017 - Jun 2018

- *Data Visualization*: Built a data dashboard from cleaning course evaluation survey data of the past 5 years in R to visualizing the data via Tableau for the school administration and faculty.
- *Statistical Analysis*: Evaluated the redundancy of the graduating student survey questions by using factor analysis.
- *Survey Design*: Led a poster publication titled *"How Meaningful Is Our Graduating Student Survey"* to showcase how to better evaluate survey design.
- Status: Part-Time
- Working hours: 19 hours per week
- Supervisor: Kathy Pulotu

Brigham Young University IDEA Lab

Researcher Intern

Jun - Aug 2017

- *Systems Theory*: Research in Systems and Control Theory with applications in a variety of areas including social networks, natural language processing, and biological systems.
- *Software Engineering*: Tasks involve developing code, modeling networks, analyzing simulations, developing theoretical results and writing research papers.
- Advisor: Sean Warnick
- Status: Full-Time
- Working hours: 40 hours per week

PROJECTS

Predict Patient Inflow at Pali Momi Hospital's Emergency Room

- *Machine Learning*: Applied quantile regression model to predict patient inflow at Pali Momi Hospital's Emergency Room (ER).
- *Consulting*: Provided recommendations for how to optimize scheduling for their ER's doctors and mid-level providers.
- Duration: Apr-Jun 2018
- Number of hours per week of effort: 2
- Advisor: Cody Baldwin

Understanding the resting behaviors of Trirectangular Tetrahedral and Triangular Prism Dice Rolls

- *Computer Vision*: Applied Faster-Recurrent Convolutional Neural Networks (RCNN) in Python to count dice rolls more efficiently by object detection.
- *Robotics*: Configured a dice rolling machine from scratch to automate the process of dice rolling and reduce bias that may come from rolling dice by hand.
- *Software Engineering*: Rewrote codes from MATLAB image processing toolbox to Python using OpenCV, scikit-image and dlib libraries.
- Duration: 2017- Present
- Number of hours per week of effort: 3
- Advisor: Paul Hurst

PUBLICATIONS

Conference Proceedings

V. Chetty, N. Woodbury, J. Brewer, **K. Lee** and S. Warnick, *Applying a Passive Network Reconstruction Technique to Twitter Data in Order to Identify Trend Setters*, IEEE Conference on Control Technology and Applications, Kohala Coast, HI, 2017.

Posters

K. Lee, K. Pulotu, *Graduating Student Survey Revision: A student effort*, California Association for Institutional Research, Garden Grove, CA, 2018.

K. Pulotu, **K. Lee**, T. Vallabh, Hong Ni M. and R. Ram, *How Meaningful is our Graduating Student Survey?*, Academic Resource Conference, Burlingame, CA, 2018.

PRESENTATIONS	<p>K. Lee, S. Fuluva, <i>Meet Don, the Autonomous Dice Rolling Machine</i>, Brigham Young University-Hawaii Undergraduate Research Conference, 2018.</p> <p>K. Lee, <i>An Evaluation of Blind Reconstruction Methods of the Dynamical Structure Functions</i>, Senior Research Presentation, Department of Computer Science, Brigham Young University-Hawaii, 2018.</p>	
SELECTED HONORS	<p>Brigham Young University—Hawaii</p> <p>Computer and Information Science Overall Outstanding Graduate 2018 (Top 1 of the graduating class)</p> <p>Undergraduate Research Best Oral Presentation Award (1 out of 30 peer research teams) 2018</p> <p>Computer Science Alumni Scholarship (Nominated by faculty) 2017 - 2018</p> <p>Mathematics Departmental Scholarship (Nominated by faculty) 2014 - 2018</p> <p>Academic Merit Scholarship (Top 5% of the school) 2014 - 2018</p> <p>University Dean's List (Top 5% of the school) 2014 - 2018</p> <p>Hong Kong Student Association Leadership Certificate 2015 - 2016</p> <p>BYUH Student Leadership Award 2015</p> <p>Association for Computing Machinery</p> <p>ACM/UPE Scholarship Award (4 out of all the ACM student members) 2017</p> <p>The National Society of Leadership and Success</p> <p>Academic Excellence Scholarship (12 out of all the NSLS inducted members) 2017</p>	
VOLUNTARY EXPERIENCE	<p>Brigham Young University—Hawaii</p> <p>Hong Kong Student Association President 2015 - 2016</p> <ul style="list-style-type: none"> • Increased membership from 50+ to 100+ in one year. • Led my association to perform on a stage in front of 3000+ audience at an annual event called <i>Culture Night</i> at BYUH. • Organized 30+ small and large events such as <i>speed dating</i>, <i>food festival</i>, career, and networking workshop for members. • Status: Part-Time • Working hours: 10 hours per week <p>Hong Kong Student Association Vice President 2014 - 2015</p> <ul style="list-style-type: none"> • Created a menu to earn a profit of \$1000+ from annual <i>food festival</i> event for the association in one night. • Status: Part-Time • Working hours: 10 hours per week <p>The Church Of Jesus Christ of Latter-Day Saints</p> <p>Missionary 2012 - 2014</p> <ul style="list-style-type: none"> • Appointed to lead and provide training to groups of up to 30 other missionaries. • Gained experience in interpersonal skills by sharing the message of Jesus Christ via means of cold calls, street contacts, and visiting people in their homes. • Status: Full-Time • Working hours: 112 hours per week 	

TEACHING EXPERIENCE	Brigham Young University—Hawaii	
	Computer Science Substitute Instructor	2017
	<ul style="list-style-type: none"> • Taught my 30+ peers two lectures about difference equations. 	
	Math Lab Tutor	2015 - 2016
	<ul style="list-style-type: none"> • Provided tutoring services to classes of Calculus I, Calculus II, Multivariate calculus. 	
PROFESSIONAL AFFILIATIONS	The National Society of Leadership and Success, Member	2017 - Present
	Phi Kappa Phi, Member	2016 - Present
	Association of Computing Machinery, Member	2016 - Present
	Upsilon Pi Epsilon, Member	2016 - Present
CERTIFICATIONS	Machine Learning by Stanford University, Coursera	Mar 2019
	Tableau Desktop Specialist, Tableau Software	Feb 2019
SKILLS	<i>Language:</i> English (Fluent), Cantonese (Native), Mandarin (Fluent) <i>Programming Language:</i> Python, R, MATLAB, SQL, C#, C, C++, PHP, Ruby, Java <i>Framework:</i> OpenCV, Scikit-learn, TensorFlow, Dlib, Pytorch <i>Other:</i> Tableau, AWS EC2, AWS Dynamodb, AWS S3	
REFERENCES	<ul style="list-style-type: none"> • Academia: <ul style="list-style-type: none"> – Dr. Vasu Chetty, Principal Data Scientist, Lucid Software Inc., <ul style="list-style-type: none"> * Field of study: Computer Science * Relationship: Thesis advisor, a teacher in multiple classes * Phone: 808-589-9586, Email: vasuc@lucidchart.com – Dr. Sean Warnick, Associate Professor, Brigham Young University, <ul style="list-style-type: none"> * Field of study: Computer Science * Relationship: Summer research internship supervisor * Phone: 801-422-6463, Email: sean@cs.byu.edu – Dr. Paul Hurst, Associate Professor, Brigham Young University—Hawaii, <ul style="list-style-type: none"> * Field of study: Mathematics * Relationship: Research advisor, a teacher in multiple classes * Phone: 808-675-3802, Email: hurstp@byuh.edu – Dr. Joel Helms, Professor, Brigham Young University—Hawaii, <ul style="list-style-type: none"> * Field of study: Mathematics * Relationship: A teacher in multiple classes * Phone: 808-675-4704, Email: joel.helms@byuh.edu – Mr. Cody Baldwin, Assistant Professor, Brigham Young University—Hawaii, <ul style="list-style-type: none"> * Field of study: Supply Chain and Operations * Relationship: A teacher in one class * Phone: 808-675-4827, Email: cody.baldwin@byuh.edu • Employment: <ul style="list-style-type: none"> – Ms. Kathy Pulotu, Institutional Research and Assessment Manager, Brigham Young University—Hawaii, <ul style="list-style-type: none"> * Relationship: Direct supervisor 	

- * Email: `kathy.pulotu@byuh.edu`
- **Dr. Rose Ram**, Associate Academic Vice President Curriculum and Assessment, Brigham Young University—Hawaii,
 - * Relationship: Indirect supervisor
 - * Email: `rose.ram@byuh.edu`