

## LARRY Y. LIU

925-787-0307 | lryliu@ucdavis.edu | linkedin.com/in/lryliu

### TECHNICAL SKILLS

**Statistical Methods:** A/B Testing, Regression Modeling, Survival Analysis, Inference Testing & Confidence Intervals

**Selected Software and Programming Languages:** Python (numpy, scipy, pandas, matplotlib), R, SQL, Tableau, Cytoscape, GePhi, Linux, OS X, Excel, LaTeX, Salesforce, Zendesk

**Machine Learning:** Clustering, Decision Trees, Graph Analysis, Regression Modeling, Data Mining

**Selected Coursework:** Linear Algebra, Discrete Mathematics, Data Structures, R Programming, Statistical Methods in Probability/Inference Testing/Regressions

### WORK EXPERIENCE

Data Analyst – Data Quality & Operations (Contractor)

Salesforce - San Francisco, CA

September 2017 - Present

Currently analyzing and improving the integrity and accuracy of Salesforce's customer accounts. Using efficient data mining and correcting methods to update key account metrics in order to assist Salesforce in a sales support function.

- Data mined using internal scripts and tools for company profile information from reliable third-party source databases used to compare against customer account information.
- Corrected and updated information found to be outdated or inaccurate from these comparisons within the Salesforce test CRM environment.
- Created daily reports for the production-side data analysts to execute changes on the production CRM environment.
- Produced additional weekly reports to monitor performance and accuracy of the data integrity of the project.

Graduate Research Associate

Case Western Reserve University School of Medicine - Cleveland, OH

October 2015 – Present

Worked under Dr. Günnur Karakurt and Dr. Mehmet Koyutürk in formulating a novel statistical technique for improving clinical screenings of female domestic violence incidents from victims suffering from traumatic brain injuries using clinical EHR datasets.

- Leveraged statistical modeling and inferential testing techniques using both the Python and R environments with related packages.
- Performed ETL on electronic health records (EHR) held in a MySQL clinical EHR database to generate experimental cohorts.
- Incorporated graph analysis and clustering methods to highlight significant patterns before visualization.
- Used GePhi, Cytoscape, and ggplot for data visualization within the framework.

IT Systems Administrator

Five9 Inc. - San Ramon, CA

July 2013 – August 2015

Worked with a small IT team administering and providing T3 support for over 450+ employees in the US and the Philippines. Assisted the company to meet SOX/PCI compliances to all corporate hardware during the company's IPO transition.

- Implemented and maintained Lansweeper asset management database and server for compliance.
- Managed the BMC Remedyforce ticketing system and generated weekly performance reports.
- Assisted in IT procurement and inventory assessment by using Coupa.

### EDUCATION

Case Western Reserve University

Master of Science in Systems Biology & Bioinformatics. 4.0 GPA w/ Thesis

Fall 2015 - Summer 2017

University of California, Davis

Bachelor of Science in Genetics, Pre-Medicine Focus Track

Fall 2008 - Spring 2012

### SELECTED PUBLICATIONS

Liu, L. Y., Bush, W. S., Koyutürk, M., Karakurt, G. Interplay between Traumatic Brain Injury and Intimate Partner Violence: A Data-Driven Approach using Electronic Health Records. In Preparation for Publication. Masters' Thesis.

Whiting, K., Liu, L. Y., Koyutürk, M., Karakurt, G. Network Map of Adverse Health Effects among Victims of Intimate Partner Violence. *Pacific Symposium of Biocomputing*, 22 (2016). Peer-Reviewed Published.