

Curriculum Vitae
Yiqun Chen
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- EDUCATION** *PhD Student in Biostatistics* *GPA: 3.94/4.0*
University of Washington, Seattle, WA
Research Interest: biology driven machine learning, causal inference, and related algorithmic, optimization challenges
- BA in Statistics, Computer Science, Applied Mathematics* August 2013 - August 2017
University of California, Berkeley, Berkeley, CA
High Distinction in General Scholarship, Highest Honors in Applied Mathematics, Honor Thesis in Statistics
- SELECTED RESEARCH EXPERIENCE** *Graduate Research Assistant* March 2018 - Present
Department of Biostatistics, UW Seattle, Seattle, WA
- Project: Machine learning models for Calcium Image data
 - Primary Duties: Working with Prof. Daniela Witten on statistical learning methods for understanding neuroscience imaging data. Derived latent state models and implemented gradient based algorithm for recovering graphical models structure in Python (with Numba/Cython wrapper for speed up)
- Graduate Research Assistant* September 2017 - Present
Department of Biostatistics, UW Seattle, Seattle, WA
- Project: When did the LANL HIV Database become informative of viral fitness
 - Primary Duties: working under Paul Edlefsen and Josh Herbeck to understand the longitudinal bias in the LANL HIV Database. Workflow includes formulating statistical frameworks, streamline codes in R, and disseminate work with collaborators.
 - Outcome: Co-author on the oral presentation at HIV Dynamics Conference 2018
- Research Assistant Statistician* January 2016 - Present
Department of Biostatistics, UC Berkeley, Berkeley, CA
- Project: Social Network Analysis and Longitudinal network data analysis
 - Primary Duties: Using R used for statistical modeling and data cleaning, and JavaScript used for visualization. Working under Prof. Maya Petersen on social network analysis project within SEARCH (Sustainable East Africa Research in Community Health) project. Primary duties include building social networks using machine learning algorithms, performing statical and casual inference on longitudinal data.
 - Outcome: Successfully generated networks of size amounting to 300,000 participants. Paper on network building submitted to Social Networks Journal, and abstract submitted to CROI 2019.
- SELECTED INDUSTRIAL EXPERIENCE** *Applied Scientist Intern* June 2018 - September 2018
A9.com (Amazon Search Palo Alto), Palo Alto, CA
- Project: Deep Learning for better tail query summarization

- Primary duties: Worked on tail query mapping problems using deep learning models implemented in Python (Tensorflow, Keras). Final model, in estimation, leads to significant purchase rate.

Designed train/test datasets from customer behavioral data using Spark and SQL, which are currently serving multiple science team projects.

- Outcome: Drafted manuscript for submission to Amazon internal Machine Learning Conference, contributed to internal datasets.

TEACHING EXPERIENCE

Teaching Assistant for Machine Learning
UC Berkeley

August 2016 - May 2017

- Served as a teaching assistant for an upper division/Master level machine learning class with Prof. Jitendra Malik and Prof. Benjamin Recht.
- Primary duties include holding office hours, grading homework and exams, and developing course materials.

Teaching Assistant for Discrete Mathematics and Probability June 2016 - August 2016, January 2017 - May 2017

UC Berkeley

- Served as a teaching assistant for a Discrete Mathematics and Probability Theory class for CS majors. Primary duties include teaching sections, holding office hours, grading homework and exams, and developing course materials.
- Developed supplementary worksheets and had high reviews from students.

HONORS & AWARDS

Dean's List (Awarded to top 4% Students)

Fall 2013 - Spring 2017

Percy Lionel Davis Award for Excellence in Scholarship in Mathematics, Department of Mathematics

Spring 2017

Senior Research Award, College of Chemistry

Spring 2017

Best poster presentation, Institute of International Studies

Spring 2017

Scholarship for Research Merit, Institute of International Studies

Fall 2016

Selected to the SAUCE student committee, *student representatives*

Fall 2016

Scholarship for Academic Excellence, Berkeley International Office

Fall 2014

Elected to join Phi Beta Kappa

Fall 2014

TECHNOLOGY SKILLS

Programming Languages: Python, Java, C, R, Stata, Bash Script, MATLAB, Mathematica, SQL

Software: Git, Vim, VirtualEnv, VirtualBox, Adobe Illustrator, Adobe Photoshop

Miscellaneous: Latex, HTML, Linux

Statistical Modeling: Proficient in machine learning models including neural networks, random forests and statistical analysis of large datasets using R and Python.