Chunyi Zhao

czhao19@ucsc.edu
http://jesscyzhao.github.io

EDUCATION

Ph.D. Statistical Science, University of California, Santa Cruz 2017–

B.A. Mathematics, Bowdoin College 2011-2015

EXPERIENCE

Research Assistant, University of California, Santa Cruz 2018–
Supervised by Professor Athanasios Kottas, University of California, Santa Cruz on point process modeling with Bayesian nonparametric approaches.

Teaching Assistant, University of California, Santa Cruz 2017-
Created and lead discussion sections, graded exams and presented lectures in a series of undergraduate and graduate statistics classes.

Data Scientist, Two Six Capital 2015–2017
Supervised by James Piette, Ph.D. and Sathya Anand, Ph.D. on building machine learning models for private equity evaluation.

- Built the company's cloud-based and distributed data science platform that are capable of scaling and parallelizing with multiple computational backend in Python, Cython and Spark in a small team.
- Implemented and tuned statistical models for predicting customer acquisition, retention and purchasing behaviors in SMB services and retail businesses. Used different optimization methods to perform Maximum Likelihood Estimation on 100+ datasets and analyzed the results.
- Researched and deployed Hierarchical Bayesian models for forecasting purposes using Gibbs sampler and MCMC.
- Created data processing pipelines to ingest and summarize 3+ TBs of data.
- Performed statistical analyses and forecast in due diligence projects and consulting engagements that result in company valuation reports and visualization in a highly-collaborative team environment.

Research Fellow, Bowdoin College 2014–2015
Supervised by Professor John O'Brien

- One year Honors project that aims to reveal the social topology of current Bowdoin student body by applying statistic analysis on student dining information.
- Employed K-Means algorithm, MLE version of Hidden Markov Model, and the Baum-Welch Algorithm in both R and Python.

SKILLS

Programming: Python, R, Julia, Cython.
Engineering: Redshift, Amazon Aurora, EC2, S3, VirtualEnv, Docker

RESEARCH INTERESTS

Nonparametric Bayesian, Mixture models, Modeling and inference for point processes, Spatial statistics, Applications in biometrics and epidemiology.

WORK IN PROGRESS

Bernstein Polynomials modeling for Nonhomogenous Poisson Process intensity with Athanasios Kottas.