

Daniel Li

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

B.S.C. IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE

Fall '14 - Spring '17 | Berkeley, CA

Note: Graduate School (PhD) Intended
GPA: 3.63/4.0

LA CANADA HIGH SCHOOL

Fall '11 - Spring '14 | La Canada, CA
GPA: 4.7/4.0

SKILLS

PROGRAMMING

Python (Scikit Learn, NumPy, etc.) • Java •
R • \LaTeX • HTML • CSS • JavaScript

MATHEMATICS & STATISTICS

Calculus: Integral • Differential • Vector
Multivariable • Lambda • (Partial)
Differential Equations • Linear Algebra
Probability Theory • Bayesian Inference
(Some) non-Parametric Statistics •
(Some) Algebra

FRAMEWORKS & MISC.

Git/VCS • Apache Spark • Hadoop •
Digital Signal Processing • Circuit and
Design • Android Studio

LINKS

Github:// [RemarkablyAverage](#)
LinkedIn:// [RemarkablyAverage](#)

COURSEWORK

GRADUATE

Algorithms & Uncertainty
Combinatorial Algorithms & DS
Computational Geometry
Special Topics in Deep Learning

UNDERGRADUATE

Efficient Algorithms
Designing Technology for CVE
Computational Photography
Computer Architectures
Human Computer Interaction
Discrete Mathematics
Probability Theory
Designing Information Systems I, II

RESEARCH EXPERIENCE

PACHTER GROUP | UNIVERSITY OF CALIFORNIA, BERKELEY

RESEARCH ASSISTANT

Fall 2015 – Present | Berkeley, CA

Principal Investigator: Professor **Lior Pachter**

- Research in novel approaches to RNA-sequencing with the features in abundance estimation transcript annotation difficulties, differential expression
- Current investigation on improving single cell RNA-seq analysis through high dimensional statistics and machine learning methods

RAO GROUP | UNIVERSITY OF CALIFORNIA, BERKELEY

RESEARCH ASSISTANT

Fall 2016 – Present | Berkeley, CA

Principal Investigator: Professor **Satish Rao**

- Research in phylogenetic algorithms and optimization of estimation accuracies on various trees and super tree reconstruction
- Current investigation on faster multiple sequence alignment (MSA) methods

INDUSTRY EXPERIENCE

NEC RESEARCH INSTITUTE RESEARCH SCIENTIST INTERN

Summer 2017 | Princeton, New Jersey

- Researched deep learning problems focused on memory based networks and video action recognition with work slated for submission to ICLR/NIPS.
- Only undergraduate research assistant in Ph.D level work and in the accepted candidate pool

FACTUAL INC. SOFTWARE ENGINEERING INTERN

Summer 2016 | Los Angeles, CA

- Worked on probabilistic deduplication, entity resolution, and record linkage of various locations databases with investigation into several methods such as Latent Dirichlet Allocation, non-parametric Bayesian inference
- Improved various metrics such as F1 score, RMSE, log loss

RESEARCH & PROJECTS

SLEUTH R

- Implement statistical algorithms for pseudo-alignment of RNA transcripts with interactive plots for real-time exploratory analysis
- Visualization of bias weights of RNA through integration of bias weights and hexamer indices

SCRNA ERROR CORRECTION PYTHON

- Investigate data re-imputation through various maximum likelihood estimators, Bayesian inference, Latent Dirichlet Allocation, non linear clustering methods, and deep learning networks.

AWARDS

2016	top 10%	Dean's Honors List College of Engineering
2014	top 3/250	MIT Think Award