Daniel Li

http://daniel-li.me
li.daniel@berkeley.edu | 949.923.8662

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

M.Sc. in Electrical Engineering & Computer Science
Fall '17 - Spring '18 | Berkeley, CA

B.Sc. in Electrical Engineering & Computer Science
Fall '14 - Spring '17 | Berkeley, CA
UD/GD GPA: 3.96
Cumulative GPA: 3.65/4.0

LA CANADA HIGH SCHOOL

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

SKILLS

PROGRAMMING

Python (SKLearn, NumPy, TensorFlow, PyTorch) • Java • R • LaTeX • HTML • CSS • JavaScript

MATHEMATICS & STATISTICS

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

FRAMEWORKS & MISC.

Git/VCS • Apache Spark • Hadoop • Android Studio

LINKS

Github:// **RemarkablyAverage**
LinkedIn:// **RemarkablyAverage**

COURSEWORK

GRADUATE

Algebraic Topology Math 215A
Algorithms & Uncertainty CS 294-128
Beyond Worst Case Analysis CS 294-134
Combinatorial Algorithms CS 270
Computational Geometry CS 274
Deep Learning CS 294-134

UNDERGRADUATE

Efficient Algorithms
Image Manipulation

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 gene feature identification and accurate dimensionality reduction through various autoencoder 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

- Research in dynamic memory networks with a focus in faster inference. Work targeted towards a publication at ICLR.
- 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