

# DANIEL LI

(949) 923 - 8662 | 16 Camellia, Irvine, CA 92620 | [li.daniel@berkeley.edu](mailto:li.daniel@berkeley.edu) |  
Github: RemarkablyAverage | LinkedIn: danielli97 | Website: [daniel-li.me](http://daniel-li.me)

## EDUCATION

### UNIVERSITY OF CALIFORNIA, BERKELEY

Aug 2014 – May 2017

#### *B.S. Electrical Engineering and Computer Science*

Berkeley, CA

- **Academics:** 3.6/4.0 GPA
- **Selected Coursework: Computer Science:** Efficient Algorithms and Intractable Problems, Algorithms and Uncertainty, Data Structures, Computer Architectures | **Mathematics:** Integral, Differential, Vector, Multivariable, Lambda Calculi, (Partial) Differential Equations, Linear Algebra, Discrete Mathematics, Probability Theory and Statistics, (some) Algebra | **Electrical Engineering:** Digital Signal Processing, Circuits
- **Skills:** Python, Java, C, SQLite, Lisp – Scheme, Clojure, HTML, LaTeX, R, MIPS, Assembly, Data Analysis, Digital Signal Processing (DSP), Android Studio, Apache Spark and Hadoop

### LA CANADA HIGH SCHOOL

Fall 2011 – Spring 2014

- **Academics:** 4.7/4.0 weighted GPA, 4.0/4.0 GPA, 2310 SAT
- *Summa Cum Laude*, graduated in 3 years, ranked 2<sup>nd</sup> out of 400

## RESEARCH EXPERIENCE

### Pachter Group – Principal Investigator: Lior Pachter

Fall 2015 – Present

#### Computational Biology (Mathematics and Genomics)

Berkeley, CA

- 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 machine learning methods

### Rao Group – Principal Investigator: Satish Rao

Spring 2016 – Present

#### Algorithms, Theory, Optimization on Computational Biology

Berkeley, CA

- Investigate phylogenetic algorithms and optimize estimation accuracies on various trees
- Current investigation on phylogenetic super-tree reconstruction

## INDUSTRY EXPERIENCE

### Factual

Summer 2016

#### Software Engineering (Machine Learning) Intern

Los Angeles, CA

- Probabilistic entity resolution of databases through natural language processing
- Improved accuracy, F1 scores, RMSE, and log loss

## PROJECTS

### KALLISTO – C++ | R | Python (Pachter Group)

- Optimization of statistical likelihood model through non uniform distribution analysis for increased accurate projections onto correct subspaces

### SLEUTH – R (Pachter Group)

- Implement statistical algorithms for differential analysis 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

## AWARDS AND HONORS

### MIT THINK

Spring 2014

#### Designed a Novel Approach to Mitigate Earthquakes

Cambridge, MA

- Awarded \$2,000

### Dean's Honors

Spring 2016

#### College of Engineering

Berkeley, California

- Awarded to top 10% of engineering class (3.9 GPA)