DANIEL LI

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

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

Aug 2014 – May 2017

B.S. Electrical Engineering and Computer Sciences

Berkeley, CA

- *Academics*: 3.6/4.0 GPA
- Coursework: Computer Science: Efficient Algorithms and Intractable Problems, Human Computer Interaction, Algorithms in Computational Biology, Structures and Interpretations of Programs (SICP), Data Structures and Algorithms, Computer Architectures | Mathematics: Integral, Differential, Vector, Multivariable, Lambda Calculi, (Partial) Differential Equations, Linear Algebra, Discrete Mathematics, Probability Theory and Statistics, (some) Algebra | Electrical Engineering & Physics: Mechanics, Electricity, Magnetism, Designing Information Devices and Systems I,II
- *Skills*: Python, Java, C, SQLite, Lisp Scheme, HTML, LaTeX, R, MIPS, Assembly, Data Analysis, Digital Signal Processing (DSP), Android Studio app development

LA CANADA HIGH SCHOOL

Fall 2011 - Spring 2014

- *Academics:* 4.7/4.0 weighted GPA, 4.0/4.0 GPA, 2310 SAT
- Graduated in 3 years, ranked 2nd 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 the improvement of bulk cell and single cell RNA-seq analysis

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 focus on tree representation matrix distance computations

INDUSTRY EXPERIENCE

Factual

Summer 2016

Software Engineering (Machine Learning) Intern

Los Angeles, CA

• Entity resolution of databases semantic similarity, clustering, and artificial neural networks

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)