# Daniel Li

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Born: February 9, 1997—Beer-Sheva, Israel
Nationality: American/Chinese

## Current position(s)

*Research Assistant*, University of California, Berkeley — Pachter Group
• Research in novel approaches to RNA-sequencing with the features in abundance estimation transcript annotation difficulties, differential expression
• Optimization of statistical likelihood model through non uniform distribution analysis to increase accuracy for projections onto subspaces

*Research Assistant*, University of California, Berkeley — Rao Group
• Investigate phylogenetic algorithms and optimize estimation accuracies on various trees

## Research Interests

Computational Biology • Machine Learning

## Positions held

2016s Factual Inc, Research & Development Intern
• Entity resolution of databases through latent dirichlet allocation on abstract word relations
2013-2014 Speech & Debate, President
2013-2014 Science Olympiad, Captain
2012s, 2013s University of California, Irvine Calit2, Research & Development Intern
2013s Pabrai Investment Funds, Analyst Intern

## Education

2014-2017 BSc *in progress* Electrical Engineering and Computer Science, University of California, Berkeley
• 3.6/4.0 GPA

2011-2014 Diploma La Cañada High School
• 4.7/4.0 GPA

## Honors & awards

2016sp Dean's Honors – awarded to top 10% (3.9 GPA) of the class, University of California, Berkeley
2014 MIT Think Award – awarded $2,000, Massachusetts Institute of Technology
2014 Summa Cum Laude – awarded to top 5% of graduating class

## Papers

In Progress Daniel Li, Kai-Sern Lim, Chen Guo. *A Novel Framework for Resolving Location Entity Duplication through Semantic Analysis*, University of California, Berkeley; Factual Inc.

In Progress Daniel Li, Vasilis Ntranos. *A Statistical Model for Error Correction of RNA Drop Rate*, University of California, Berkeley.

## Talks

2016s Li, Daniel, *Latent Dirichlet Allocation and Applications in Data Deduplication*, Factual Inc.*June 9, 2016*

## Relevant Skills

Proficient Programming Languages: Java • Python • C • R
Mathematics: Calculus (integral, differential, vector, multivariable) • Discrete Mathematics

Competent Programming Languages: CSS • HTML • Android SDK development • Shiny • LISP/Clojure/Scheme • SQLite
Mathematics: Statistics • Calculus (Lambda) • Probability theory • Algebra • (Partial) Differential Equations)

## Coursework

1** DENOTES UPPER DIVISION

Fall 2014 *University of California, Berkeley*
Computer Science 61A — Structure and Interpretation of Computer Programs
Mathematics 1A — Calculus
Earth & Planetary Science C129 — Biometerology
Education 186AC — The Southern Border
Comparative Literature R1B — Comparative World Literature
Mechanical Engineering 98 — Directed Group Study

Spring 2015 *University of California, Berkeley*
Mathematics 54 — Linear Algebra and Differential Equations
Computer Science 61B — Data Structures

Physics for Scientists and Engineers 7A — Mechanics
Education 190 — Critical Studies in Education
Computer Science 98 — Directed Group Study

Summer 2015 *University of California, Berkeley*
Mathematics W53 — Multivariable Calculus

*California State University, Fullerton*
Physics 226 — Electricity & Magnetism
Physics 226L — Electricity & Magnetism Lab

Fall 2015 *University of California, Berkeley*
Computer Science 70 — Discrete Mathematics & Probability Theory
Electrical Engineering 16A — Designing Information Devices and Systems I
Computer Science 199 — Research under Professor Lior Pachter
History 162A — Europe and the World: Wars, Empire, Nations 1648-1914

Spring 2016 *University of California, Berkeley*
Computer Science 61C — Machine Architectures
Computer Science C8 — Introduction to Data Science
Computer Science 160 — Human Computer Interaction
Computer Science 199 — Research under Professor Lior Pachter
College Writing 25AC — United States Education
College Writing 10A — Introduction to Public Speaking
College Writing 9C — Academic Writing

Fall 2016 *(IP) University of California, Berkeley*
Computer Science 170 — Efficient Algorithms & Intractable Problems
Computer Science 176 — Algorithms in Computational Biology
Electrical Engineering 16B — Designing Information Devices and Systems II
Computer Science 195 — Ethics in Computer Science
Computer Science 199 — Research under Professor Lior Pachter
Computer Science 199 — Research under Professor Satish Rao