

# Daniel Li

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## Education

**Columbia University** Fall '18 - IP  
Ph.D in Computer Science  
M.Phil in Computer Science  
Area in Machine Learning &  
Computational Biology  
**UC - Berkeley** Fall '17 - Spring '18  
M.Sc. in Electrical Engineering  
Computer Science  
**UC - Berkeley** Fall '14 - Spring '17  
B.Sc. in Electrical Engineering  
Computer Science

## Skills

**Programming**  
Python : Java : R : LaTeX : HTML  
**Frameworks | Libraries | Misc.**  
PyTorch : Tensorflow : NumPy :  
SKLearn : Git  
**Mathematics & Statistics**  
Statistics : Algebra : Topology

## Coursework

**Graduate**  
Algorithms & Uncertainty  
Beyond Worst Case Analysis  
Combinatorial Algorithms  
Computational Geometry  
Deep Learning  
Statistical Inference  
Biostatistics

## Awards

NVIDIA Grant  
ICLR Travel Award  
Dean's Honors  
MIT Think Award

## Research Experience

**Pe'er Group @ Columbia University** Fall 2018 : **Present**  
Researcher

- Use image synthesis for contextual generation of cells to understand cell-cell interactions at a subcellular resolution

**Pachter Group @ UC - Berkeley** Fall 2015 : **Spring 2018**  
Research Assistant

- Research in approaches to RNA-sequencing with features in abundance estimation, transcript annotation difficulties, differential expression

**Rao Group @ UC - Berkeley** Fall 2016 : **Spring 2018**  
Research Assistant

- Investigation on gene feature identification and accurate dimensionality reduction through recurrent memory autoencoders

## Industry Experience

**Memorial Sloan Kettering Cancer Center** Summer 2019  
Researcher

- Computer vision techniques for analyzing and understanding tumor data

**General Industries Group** Fall 2017 : **Fall 2018**  
Co-Founder (2)

- Trading account (equities, options) of **\$1M USD** reaching **120% ROI YTD**

**NEC Research Institute** Summer, Fall 2017  
Research Scientist Intern

- Research in adaptive memory networks with a focus on faster inference.
- **First undergraduate** researcher in Ph.D level work

**Factual Inc.** Summer 2016  
Software Engineering Intern

- Worked on probabilistic deduplication, entity resolution, and record linkage using Latent Dirichlet Allocation and non-parametric Bayesian inference

## Teaching Experience

**UC - Berkeley, Columbia University** Fall 2017 : **Fall 2019**  
Graduate Student Instructor (5 semesters)

- Human Computer Interaction, Machine Learning for Functional Genomics

## Publications

- **Daniel Li**, Qiang Ma, Andrew Liu, Justin Cheung, Itzik Pe'er. *Understanding Subcellular Protein Distributions Through Semantic Image Synthesis*, Manuscript in Preparation for **ICLR 2020**
- **Daniel Li**, Asim Kadav. *Adaptive Memory Networks*, **NIPS 2017 Workshop: Deep Learning at Supercomputer Scale & ICLR 2018 Workshop**