

# Daniel Li

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## Education

UC - Berkeley Fall '17 - Spring '18  
M.Sc. in Electrical Engineering  
Computer Science

GPA : 4.0/4.0

UC - Berkeley Fall '17 - Spring '18  
B.Sc. in Electrical Engineering  
Computer Science

GPA : 3.96/4.0      UD/GD Tech.  
3.65/4.0      Cumulative

## Skills

### Programming

Python : Java : R : LaTeX : HTML

### Frameworks | Libraries | Misc.

PyTorch : Tensorflow : NumPy :  
SKLearn : Git/VCS : Hadoop :  
Apache Spark

### Mathematics & Statistics

Linear Algebra : Probability :  
Bayesian Inference : Non-parametric  
Statistics : Algebra : Topology

## Coursework

### Graduate

Algorithms & Uncertainty  
Beyond Worst Case Analysis  
Combinatorial Algorithms  
Computational Geometry

Deep Learning

### Undergraduate

Efficient Algorithms  
Computational Imaging

## Awards

Dean's Honors  
MIT Think Award

## Research Experience

Pachter Group @ UC - Berkeley

Fall 2015 : Present

Research Assistant

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

Rao Group @ UC - Berkeley

Fall 2016 : Present

Research Assistant

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

## Industry Experience

NEC Research Institute

Summer 2017

Research Scientist Intern

- ✓ Research in adaptive memory networks with a focus in faster inference. Currently under submission for **ICLR '18**
- ✓ **First undergraduate** researcher in Ph.D level work and in the hired candidate pool

Factual Inc.

Summer 2016

Software Engineering Intern

- ✓ 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

## Teaching Experience

CS 160 Human Computer Interaction

Fall 2017 : Present

Graduate Student Instructor

- ✓ Create content and lead section discussion group of 30 students on a weekly basis
- ✓ Hold office hours and grade student work

## Research Projects

Adaptive Memory Networks

Python

- ✓ Designed and implemented a dynamic memory network implemented using PyTorch's automatic differentiation to achieve faster inference times on QA tasks
- ✓ Achieved state of the art results on bAbi text dataset
- ✓ Under review as a conference paper in **ICLR '18**

scRNA - NET

Python

- ✓ Designed specialized autoencoder architectures to correct scRNA (single cell RNA sequenced data) data corruption
- ✓ Led the project team of 2 other students
- ✓ Proposal under submission to NVIDIA GPU Academic Grant Program