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 Worse 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