

Daniel Li

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Education

United States Army
Commission (OCS) May 2023*

Columbia University
Area in Computer Science:
Natural Language Processing
Human Computer Interaction
Ph.D Fall 2018 - Summer 2022
M.Phil Fall 2018 - Spring 2021
Advisor: Prof. Lydia Chilton

University of California, Berkeley
Area in Electrical Engineering
& Computer Science
M.Sc. Fall 2017 - Spring 2018
B.Sc. Fall 2014 - Spring 2017
Advisor: Prof. Satish Rao

Skills

Financial Instruments
Derivatives : Equities : Crypto :
Venture Capital

Trading & Risk Analysis
Discretionary : Technical (Signals)
Tax & Compliance

Programming
Python : LaTeX : Bash : CSS/HTML

Frameworks & Libraries
PyTorch : Tensorflow : NumPy :
Hugging Face : AllenNLP

Natural Language Processing
Summarization : Translation :
Question Answering Systems

Design & UI & UX
Figma : Omnigraffle : Prototyping :
User Study Interviews

Current Position(s)

Proprietary Trading Group¹ March 2017 : **Present**
Co-Founder (total team of 2) **Trading & Finance**

- Mid 7 figure USD accounts, low 8 figure USD notional position sizing.
- Performance: 550% ROI** since inception (as of Q1'22)
- Various strategies (fundamental and algorithmic); sectors: equities, commodities, digital assets

Dekrypt Capital February 2018 : **Present**
Limited Partner (LP) **Venture Capital**

- Blockchain and privacy-preserving focused firm, **9 figure USD AUM**
- Co-investors: a16z, Coinbase Ventures, Arrington XRP, Softbank, Tiger Global, Samsung Next

United States Army (Active Duty) October 2022 : **Present**
Officer Candidate (O9S) **Military Service**

- Patriotic call to serve and give back for all the opportunities I was given**
- Intended* branch: Infantry; BCT @ Ft. Leonard Wood, OCS @ Ft. Benning

Industry Experience

Google Research Summer, Fall 2021
Researcher @ Cloud AI Translation **Natural Language Processing**

- Investigated confidence score calibration in multilingual quality estimation
- Improved automatic quality classification of translation systems

Google Research Summer, Fall 2020
Researcher @ Google Translate **Natural Language Processing**

- Investigated multilingual translation models using SOTA English classifiers
- Improved automatic speech translation by +1 to +1.4 BLEU points

Memorial Sloan Kettering Cancer Center Summer 2019
Researcher @ Dana Pe'er Lab **Computer Vision & Imaging**

- Computer vision techniques for analyzing and understanding tumor data

NEC Research Institute Summer, Fall 2017
Research Intern **Natural Language Processing**

- Research in adaptive memory networks with a focus on faster inference

Factual Inc. (Foursquare) Summer 2016
Software Engineering Intern **Natural Language Processing**

- Worked on probabilistic deduplication, entity resolution, and record linkage

Academic Experience

NLP & HCI @ Columbia University Fall 2018 : **Summer 2022**
PhD Researcher @ Computational Design Lab **Natural Language Processing**

- Doctoral Thesis: Enabling Structured Navigation of Longform Spoken Dialog with Automatic Summarization**
- Focused on abstractive summarization for speech applications.
- Supervised 2 Masters' and 2 Bachelors' student research projects

¹ Using personal assets among co-founders, currently not incorporated as any entity. Not in any active positions as of Q1'22.

* Anticipated and in progress

Mathematics & Statistics
Linear Algebra : Probability :
Bayesian Inference

Miscellaneous
Public Speaking : Open Ended
Research : 5 star Uber
passenger rating

Coursework

Graduate
Algorithms & Uncertainty
Beyond Worst Case Analysis
Combinatorial Algorithms
Computational Geometry
Deep Learning

Undergraduate
Efficient Algorithms
Computational Imaging
Artificial Intelligence
Computer Vision
User Interface Design

Awards & Misc.

Google Cloud Grant 2x
NVIDIA Grant
ICLR Travel Award
CS:GO SMFC (2017)

Reviewing

2022
UIST (User Interface Software
and Technology)
EMNLP (Empirical Methods in
Natural Language Processing)

TA @ UC-Berkeley, Columbia University Fall 2017 : **Spring 2020**
Graduate Student Instructor **6 Semesters**
◦ Human Computer Interaction, Machine Learning for Functional Genomics

Rao Group @ UC-Berkeley Fall 2015 : **Spring 2018**
Research Assistant **Machine Learning & Biology**
◦ **Master's Thesis:** *Adaptive Memory Networks*
◦ Investigation on gene feature identification and dimensionality reduction

Publications

Daniel Li*, Thomas Chen*, Albert Tung, Lydia Chilton. *An Abstractive Hierarchical Dialog Summarization Corpus: Designing, Collecting, and Annotating Recursive Summaries*. In Preparation.

Daniel Li*, Thomas Chen*, Albert Tung, Lydia Chilton. *Improving User Navigation and Browsing of Longform Spoken Dialog*. In Submission.

Daniel Li, Junpei Zhou, Music Li, Lydia Chilton. *Towards Practical Translation Quality Estimation in Bilingual Models*. Under Review.

Daniel Li*, Thomas Chen*, Albert Tung, Lydia Chilton. *Hierarchical Summarization for Longform Spoken Dialog*. **UIST 2021**.

Jennifer Chen, Faisal Ladhak, **Daniel Li** and Noémie Elhadad. *Incorporating Human Explanations for Robust Hate Speech Detection*. **ACL-IJCNLP 2021 Workshop**.

Daniel Li, Te I, Naveen Ari, Colin Cherry, Dirk Padfield. *Sentence Boundary Augmentation for Neural Machine Translation Robustness*. **ICASSP 2021**.

Daniel Li*, Jenny Chen*, ... *Counterfactual Hypothesis Testing of Tumor Micro-environment Through Semantic Image Synthesis*. **BioArXiv**.

Justin M. Cheung, Hanan Baker, **Daniel Li**, Daniel Stor, Daniel A. Heller. *Abstract 1719: Drug-loaded porphyrin nanoparticles as a platform for targeted and photodynamic combination therapy*. **American Association for Cancer Research**.

Daniel Li, Asim Kadav. *Adaptive Memory Networks*. **ICLR 2018**.

Patents

System and method for faster interfaces on text-based tasks using adaptive memory networks. Patent Number: 10853575. Asim Kadav, **Daniel Li**. NEC Laboratories America.