Daniel Li

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Education

United States Army OCS
Commission   *March 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 Group[1]   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 (09S)   **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

Mathematics & Statistics
Linear Algebra : Probability : Bayesian Inference

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

Coursework

Graduate
Algorithms & Uncertainty
Beyond Worse 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.