Carlos E. Jimenez

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carlosejimenez.com

Research Interests

LLM Training and Evaluation, LMs for Code and Software Engineering, LM Agents, Task-Oriented Dialogue

Education

Princeton University   September 2020 - Present

PhD Computer Science
Advisor: Prof. Karthik Narasimhan

University of Utah   January 2017 - May 2020

B. S. Computer Science (GPA: 3.95, Cum Laude)
Minor: Mathematics
Thesis Supervisor: Prof. Ellen Riloff

De Anza College   September 2015 - December 2017

Economics and Computer Information Science

Research

[SWE-bench: Can Language Models Resolve Real-World GitHub Issues?](#)

Carlos E. Jimenez*, John Yang*, Alexander Wettig, Shunyu Yao, Kexin Pei, Ofir Press, Karthik Narasimhan
ICLR (2024) oral presentation, * Equal Contribution

[C-STS: Conditional Semantic Textual Similarity](#)

Carlos E. Jimenez*, Ameet Deshpande*, Howard Chen, Vishvak Murahari, Victoria Graf, Tanmay Rajpurohit, Ashwin Kalyan, Danqi Chen, Karthik Narasimhan
EMNLP (2023), * Equal Contribution

[MUX-PLMs: Pre-training Language Models with Data Multiplexing](#)

Vishvak Murahari, Ameet Deshpande, Carlos E. Jimenez, Izhak Shafran, Mingqiu Wang, Yuan Cao, Karthik Narasimhan
EMNLP Findings (2023)

[DataMUX: Data Multiplexing for Neural Networks](#)

Vishvak Murahari, Carlos E. Jimenez, Runzhe Yang, Karthik Narasimhan
NeurIPS (2022)

[CARETS: A Consistency and Robustness Evaluative Test Suite for VQA](...)
Carlos E. Jimenez, Olga Russakovsky, Karthik Narasimhan
ACL (2022)

[Learning Physical Commonsense Knowledge](...)
Carlos E. Jimenez
University of Utah Technical Report UUCS 20-005 (2020)

Awards

Nokia Bell Labs Prize (2nd Prize) 2022
DataMUX: Data Multiplexing Neural Networks

Qualcomm Innovation Fellowship North America *(finalist)* 2022
Data Multiplexing Neural Networks

Experience

Assistant Instructor January 2022 - May 2022
Department of Computer Science, Princeton University
COS 484, Natural Language Processing
Taught by Prof. Karthik Narasimhan

Assistant Instructor January 2022 - May 2022
Department of Computer Science, Princeton University
COS 487, Theory of Computation
Taught by Prof. Gillat Kol

Data Science Intern May 2020 - September 2020
Kytheran Labs
Salt Lake City, Utah

Student Researcher August 2019 - December 2019
Department of Mathematics, University of Utah
Applications of Machine Learning and Data Science in Finance
Supervised by Prof. Jingyi Zhu

Teaching Assistant August 2019 - December 2019
School of Computing, University of Utah
General assistant for CS 3100 Models of Computation
Taught by Prof. Ganesh Gopalakrishnan

Undergraduate Researcher
January 2019 - August 2019

School of Computing, University of Utah
Methods and Analysis in Numerical Data Computing
Advised by Prof. Ganesh Gopalakrishnan

Languages and Software

PyTorch, Huggingface Transformers, Python, Fairseq, Numpy, JAX, FLAX, Tensorflow, Plotly, C/C++, SQL, Unix/Linux, Git, C#, Racket, HTML/CSS, LaTeX, Amazon Mechanical Turk, Google Cloud