# Jiashu Xu

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## **EDUCATION**

Harvard University Cambridge, USA

Master's in Computational Science and Engineering, GPA: 4.0/4.0

September 2022 - June 2024

University of Southern California Los Angeles, USA

B.S. in Applied Math & Computer Science, GPA: 3.97/4.0

August 2020 - June 2022

University of California, Irvine

Irvine, USA

B.S. in Applied Math & Computer Science, GPA: 3.984/4.0 September 2018 - August 2020

Hong Kong University of Science and Technology

Hong Kong, China

UCEAP summer study abroad, study robotics, GPA: 4.0/4.0

June - August 2019

**Awards:** Center for Undergraduate Research in Viterbi Engineering Fellowship, Jennifer Battat Scholarship, USC Transfer Merit Scholarship, USC Academic Achievement Award, USC & UCI Dean's List (all semesters)

## **PUBLICATION**

[1] SalKG: Learning From Knowledge Graph Explanations for Commonsense Reasoning

Aaron Chan, **Jiashu Xu**, Boyuan Long, Soumya Sanyal, Tanishq Gupta, Xiang Ren *Conference on Neural Information Processing Systems (NeurIPS)*, 2021.

code paper

[2] Dissection Gesture Sequence during Nerve Sparing Predicts Erectile Function Recovery after Robot-Assisted Radical Prostatectomy

Runzhuo Ma, **Jiashu Xu**, Ivan Rodriguez, Gina DeMeo, Aditya Desai, Loc Trinh, Jessica H. Nguyen, Anima Anandkumar, Jim C. Hu, Andrew J. Hung *NPJ Digit Medicine*, 2022.

abstract

[3] Dissection Assessment for Robotic Technique (DART) to Evaluate Nerve-Spare of Robot-Assisted Radical Prostatectomy

Runzhuo Ma, Alvin Hui, **Jiashu Xu**, Aditya Desai, Michael Tzeng, Emily Cheng, Loc Trinh, Jessica H. Nguyen, Anima Anandkumar, Jim C. Hu, Andrew J. Hung *American Urological Association Annual Conference (AUA)*, 2022. abstract paper

[4] Unified Semantic Typing with Meaningful Label Inference

James Y. Huang, Bangzheng Li\*, **Jiashu Xu\***, Muhao Chen

North American Chapter of the Association for Computational Linguistics (NAACL), 2022. code paper

[5] Neural-Sim: Learning to Generate Training Data with NeRF

Yunhao Ge, Harkirat Behl\*, **Jiashu Xu\***, Suriya Gunasekar, Neel Joshi, Yale Song, Xin Wang, Laurent Itti, Vibhav Vineet

European Conference on Computer Vision (ECCV), 2022.

code paper

[6] X-Norm: Exchanging Normalization Parameters for Bimodal Fusion

Yufeng Yin\*, **Jiashu Xu\***, Tianxin Zu, Mohammad Soleymani

ACM International Conference on Multimodal Interaction (ICMI), 2022.

paper

[7] **EXACT:** Compositional Augmentation for Image-level Weakly-Supervised Instance Segmentation **Jiashu Xu\***, Yunhao Ge\*, Brian Nlong Zhao, Laurent Itti, Vibhav Vineet *Transaction on Machine Learning Research (TMLR)*, 2023. Under review.

[8] Language-Driven Compositional Context Image Synthesis for Object Detection Yunhao Ge\*, Jiashu Xu\*, Laurent Itti, Vibhav Vineet

arxiv

[9] Can NLI Provide Proper Indirect Supervision for Low-resource Biomedical Relation Extraction? Jiashu Xu, Mingyu Derek Ma, Muhao Chen

Association for Computational Linguistics (ACL), Oral. 2023.

arxiv

## [10] Instructions as Backdoors: Backdoor Vulnerabilities of Instruction Tuning for Large Language **Models**

Jiashu Xu, Mingyu Derek Ma, Fei Wang, Muhao Chen

Empirical Methods in Natural Language Processing (EMNLP), 2023. Under review.

arxiv

## WORK & TEACHING EXPERIENCE

New York, USA **Amazon Alexa Science** 

**Applied Scientist** 

*Summer 2023* 

• LLM research for science team

**Learning Assistant** Los Angeles, USA

CSCI 567: Machine Learning with Professor Haipeng Luo

Fall 2021

• Held Office Hours, monitored piazza to answer students' questions regarding math and code implementation and graded homework and projects

**Teach for Los Angeles** 

Mentor

Los Angeles, USA

Mentor Spring 2021

• Tutored middle school students from LA K-12 community 1-on-1 on mathematics two hours every week

• Inspired students to reach full math potential in preparation for college and STEM careers

**Math CEO** Irvine. USA

Fall 2018 - Spring 2020

Coordinated meetings with Santa Ana middle school students and taught mathematical thinking

Johnson & Johnson

Shanghai, China

Digital & Analytics Data Assistant

Summer 2019

- Tracked counterfeit products or parallel products from various sales channels using NLP techniques including semantic role labeling and named entity recognition
- Devised context extractor based on Jieba tokenizer and Chinese word vectors
- Presented in PCS 2019 medicine CIO summit about NLP approach for tracking counterfeit products

**Math CEO** Irvine, USA Mentor Fall 2018 - Spring 2020

Coordinated meetings with Santa Ana middle school students and taught mathematical thinking

Wind Information Shanghai, China

Quantitative Index Research Analyst

March - July 2018

- Collaborated with product managers to launch Wind's new product: Wind Equity Backtester and implemented multiple prototype algorithms with test codes using python-wind and Pytest
- Code-reviewed index-related codes, queried Wind index database to resolve clients' complaints

## **SKILLS & MORE**

Languages: Python, C++, Java, Scala, MATLAB, R, {Java, Type}script, HTML, CSS, LaTex, Bash, SQL

Frameworks: PyTorch, TensorFlow, scikit-learn, Pandas, Spark, React, Spring