Chenyang Yang

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EDUCATION	**Carnegie Mellon University**, Pittsburgh, Pennsylvania, USA

Ph.D. in Software Engineering, School of Computer Science   Aug 2021 – Present
- Adviser: Prof. Christian Kästner, Prof. Sherry Tongshuang Wu
- Focus: Human-centered AI, ML engineering, AI model testing and evaluation.

Peking University, Beijing, China

B.S. (Summa Cum Laude) in Computer Science, Turing Class   Sep 2017 – Jul 2021
- Adviser: Prof. Yingfei Xiong
- Cumulative GPA: 3.83 / 4.00, Ranking: 5 / 230

PUBLICATIONS

[1] **Chenyang Yang**, Yining Hong, Grace Lewis, Tongshuang Wu, Christian Kästner. What Is Wrong with My Model? Identifying Systematic Problems with Semantic Data Slicing. In *IEEE/ACM International Conference on Automated Software Engineering (ASE)*, 2024

[2] Jenny T Liang, **Chenyang Yang**, and Brad A Myers. A Large-Scale Survey on the Usability of AI Programming Assistants: Successes and Challenges. In *Proceedings of the ACM/IEEE 46th International Conference on Software Engineering (ICSE)*, 2024.

[3] Wanqin Ma*, **Chenyang Yang***, and Christian Kästner. (Why) Is My Prompt Getting Worse? Rethinking Regression Testing for Evolving LLM APIs. In *Proceedings of the International Conference on AI Engineering - Software Engineering for AI (CAIN)*, 2024.

[4] Yuan-An Xiao, **Chenyang Yang**, Bo Wang, and Yingfei Xiong. Accelerating Patch Validation for Program Repair with Interception-Based Execution Scheduling. In *IEEE Transactions on Software Engineering (TSE)*, 2024.

[5] **Chenyang Yang**, Rishabh Rustogi, Rachel A Brower-Sinning, Grace Lewis, Christian Kästner, and Tongshuang Wu. Beyond Testers' Biases: Guiding Model Testing with Knowledge Bases using LLMs. In *Findings of the Association for Computational Linguistics: EMNLP 2023 (EMNLP)*, 2023.

[6] **Chenyang Yang**, Rachel A Brower-Sinning, Grace Lewis, Christian Kästner, and Tongshuang Wu. Capabilities for Better ML Engineering. In *Proceedings of the AAAI-23 Workshop on Artificial Intelligence Safety (SafeAI)*, February 2023.

[7] **Chenyang Yang**, Rachel A Brower-Sinning, Grace Lewis, and Christian Kästner. Data Leakage in Notebooks: Static Detection and Better Processes. In *Proceedings of the 37th IEEE/ACM International Conference on Automated Software Engineering (ASE)*, New York, NY: ACM Press, October 2022.

[8] **Chenyang Yang**, Shurui Zhou, Jin L.C. Guo, and Christian Kästner. Subtle Bugs Everywhere: Generating Documentation for Data Wrangling Code. In *Proceedings of the 36th IEEE/ACM International Conference on Automated Software Engineering (ASE)*, Los Alamitos, CA: IEEE Computer Society, November 2021.

[9] Yifan Chen, **Chenyang Yang**, Xin Zhang, Yingfei Xiong, Hao Tang, Xiaoyin Wang, Lu Zhang. Accelerating Program Analyses in Datalog by Merging Library Facts. *International Static Analysis Symposium (SAS)*, October 2021.

INDUSTRY EXPERIENCE

Amazon Search, Applied Scientist Intern   May 2024 – Dec 2024
with Michael Shavlovsky, Tesi Xiao
- Project: An Interactive Framework for Multi-objective Rankers Design

INVITED TALKS
- Introduction to Human-AI Interaction Research, Amazon Search, August 2024.
- Capabilities for Better ML Engineering, Siemens, March 2023.

PROFESSIONAL SERVICE
- **Reviewer** for EMNLP 2023, ACL ARR (2024).
- **Shadow Reviewer** for ICSE (2021 - 2023), FSE (2021 - 2023), and ASE (2020 - 2021).
- **Student Volunteer** for ASE 2020.

TEACHING EXPERIENCE	**Machine Learning in Production**, Carnegie Mellon University Instructor: Christian Kästner, Sherry Tongshuang Wu	Aug 2024 – Dec 2024

- Led weekly recitations and designed labs.
- Guest lecture on "Design and Architecture" for ML-enabled systems.

Large Language Model Systems, Carnegie Mellon University — Jan 2024 – May 2024
Instructor: Lei Li

- Designed homework assignments on distributed model training.
- Coordinated student projects and presentations.

Introduction to Computer Systems (Seminar), Peking University — Sep 2020 – Jan 2021

- Designed and led weekly recitations for a group of 14 students

AWARDS & HONORS

- Award for Research Excellence, Peking University — Oct 2020
- Turing Scholarship, Peking University — Dec 2019
- Award for Academic Excellence, Peking University — Nov 2018
- May 4th Scholarship, Peking University — Nov 2018

SKILLS LaTeX, Python, JavaScript/TypeScript, Svelte, React, C/C++, Java, Datalog.