Jenny T. Liang

Ph.D. Student, School of Computer Science, Carnegie Mellon University

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Education

Carnegie Mellon University, Pittsburgh, PA, USA   2022 –
Ph.D. in Software Engineering *(GPA: 4.00)*

University of Washington, Seattle, WA, USA   2015 – 2021
B.S. in Computer Science, B.S. in Informatics *(GPA: 3.77)*

Publications (* denotes equal contribution, ♟ Google Scholar)

Refereed Conference Publications

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

[10] NLPositionality: Characterizing Design Biases of Datasets and Models
Sebastin Santy*, Jenny T. Liang*, Ronan Le Bras, Katharina Reinecke, Maarten Sap
Annual Conference of the Association for Computational Linguistics (ACL) 2023
🏅*Outstanding Paper Award*

[9] A Qualitative Study on the Implementation Design Decisions of Developers
Jenny T. Liang, Maryam Arab, Minhyuk Ko, Amy J. Ko, Thomas D. LaToza
IEEE/ACM International Conference on Software Engineering (ICSE) 2023
🏅*ACM SIGSOFT Distinguished Paper Award*

[8] Understanding Skills of OSS Contributors on GitHub
Jenny T. Liang, Thomas Zimmermann, Denae Ford
ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) 2022

[7] Towards Mining OSS Skills from GitHub Activity
Jenny T. Liang, Thomas Zimmermann, Denae Ford
IEEE/ACM International Conference on Software Engineering—New Ideas and Emerging Results (ICSE–NIER) 2022

[6] An Exploratory Study of Sharing Strategic Programming Knowledge
Maryam Arab, Thomas D. LaToza, Jenny Liang, Amy J. Ko
ACM SIGCHI Conference on Human Factors in Computing Systems (CHI) 2022

[5] HowToo: A Platform for Sharing, Finding, and Using Programming Strategies
Maryam Arab, Jenny Liang*, Yang Yoo*, Amy J. Ko, Thomas D. LaToza
IEEE Symposium on Visual Languages and Human–Centric Computing (VL/HCC) 2021

[4] Whale Watching in Inland Indonesia: Analyzing a Small, Remote, Internet–Based Community Cellular Network
Matthew Johnson, Jenny Liang, Michelle Lin, Sudheesh Singanamalla, Kurtis Heimerl
The Web Conference (WWW) 2021

[3] Experiences: Design, Implementation, and Deployment of CoLTE, a Community LTE Solution
Spencer Sevilla, Matthew Johnson, Pathirat Kosakanchit, Jenny Liang, Kurtis Heimerl
ACM International Conference on Mobile Computing and Networking (Mobicom) 2019

Other Refereed Publications

[2] An All–in–One Community LTE Network
Spencer Sevilla, Matthew Johnson, Pathirat Kosakanchit, <u>Jenny Liang</u>, Kurtis Heimerl
ACM International Conference on Mobile Computing and Networking (Mobicom) 2019

In Submission

[1] Delphi: Towards Machine Ethics and Norms | [New York Times](#) | [WIRED](#)
Liwei Jiang, Jena D. Hwang, Chandra Bhagavatula, Ronan Le Bras, <u>Jenny Liang</u>, Sydney Levine, Jesse Dodge, Keisuke Sakaguchi, Maxwell Forbes, Taylor Sorenson, Jonathan Borchardt, Jack Hessel, Saadia Gabriel, Yulia Tsvetkov, Oren Etzioni, Maarten Sap, Regina Rini, Yejin Choi

Research Experience

Carnegie Mellon University, Software & Societal Systems Department *Graduate Research Assistant*, advised by Brad A. Myers	2022 –
Microsoft Research, Software Analysis & Intelligence (SAINTES) Group *Research Intern*, advised by Chris Bird, Thomas Zimmermann, Carmen Badea, Denae Ford Robinson, Rob DeLine, & Nicole Forsgren	Summer 2023
Allen Institute for Artificial Intelligence, Mosaic Team *Predoctoral Young Investigator*, advised by Ronan Le Bras & Yejin Choi	2021 – 2022
University of Washington, Information School, Code & Cognition Lab *Undergraduate Research Assistant*, advised by Amy J. Ko	2020 – 2021
Microsoft Research, Software Analysis & Intelligence (SAINTES) Group *Undergraduate Research Intern*, advised by Denae Ford Robinson & Thomas Zimmermann	Spring 2021
Allen Institute for Artificial Intelligence, Mosaic Team *Undergraduate Research Intern*, advised by Swabha Swayamdipta, Chandra Bhagavatula, & Yejin Choi	2020 – 2021
University of Washington, Computer Science & Engineering, Information and Communication Technology for Development (ICTD) Lab *Undergraduate Research Assistant*, advised by Spencer Sevilla & Kurtis Heimerl	2019 – 2020

Awards, Honors, & Fellowships

Outstanding Paper Award, Annual Conference of the Association for Computational Linguistics 2023. *Awarded to less than 2% of papers accepted to the conference.*	2023
Ford Fellow Honorable Mention, Ford Foundation	2023
ACM SIGSOFT Distinguished Paper Award, IEEE/ACM International Conference on Software Engineering 2023. *Awarded to less than 5% of papers accepted to the conference.*	2023
Graduate Research Fellow, National Science Foundation ($111,000 over 3 years)	2021
Outstanding Undergraduate Researcher Honorable Mention, Computing Research Association	2021
Undergraduate Service Award, University of Washington, Computer Science & Engineering. *Award to recognize 3 UW CSE undergraduates out of 2,000 students for their outstanding service to the department.*	2020

Husky 100, University of Washington. *Award to recognize 100 UW students out of 55,000 students in honor of their outstanding contributions to the university.*   2020

Outstanding Engineer Award, Allen Institute for Artificial Intelligence ($12,000)   2020

Presentations

Talks

NLPositionality: Characterizing Design Biases of Datasets and Models
Annual Conference of the Association for Computational Linguistics (ACL) 2023, Toronto, Canada   Jul 2023

A Qualitative Study on the Implementation Design Decisions of Developers
IEEE/ACM International Conference on Software Engineering (ICSE) 2023, Melbourne, Australia   May 2023

Understanding Skills of OSS Contributors on GitHub
ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) 2022, Singapore   Nov 2022

Towards Mining OSS Skills from GitHub Activity
IEEE/ACM International Conference on Software Engineering (ICSE) 2022, Pittsburgh, PA, USA   May 2022

Understanding Skills for OSS Communities (Invited talk)
Microsoft Research, Redmond, WA, USA   Sep 2021

Interpreting Hate Speech Classifiers: Does Dataset Label Space Matter?
UW Undergraduate Research Symposium, Seattle, WA, USA   May 2021

Explicit Programming Strategies
UW Undergraduate Research Symposium, Seattle, WA, USA   May 2020

Posters, Demos, & Other Talks

A Qualitative Study on the Implementation Design Decisions of Developers (Poster)
IEEE/ACM International Conference on Software Engineering (ICSE) 2023, Melbourne, Australia   May 2023

Towards Mining OSS Skills from GitHub Activity (Poster)
IEEE/ACM International Conference on Software Engineering (ICSE) 2022, Pittsburgh, PA, USA   May 2022

An All–in–One Community LTE Network (Demo)
ACM International Conference on Mobile Computing and Networking (Mobicom) 2019, Los Cabos, Mexico   Oct 2019

Selected Press

New York Times, "Can a Machine Learn Morality?"   Nov 2021

WIRED, "This Program Can Give AI a Sense of Ethics—Sometimes."   Oct 2021

Teaching

Undergraduate Teaching Assistant, University of Washington, Computer Science & Engineering   2018 – 2020

- *Building Academic Success through Bottom–Up Computing (Introduction to Computer Systems)*, CSE 391B. (Spring 2020)
- *Software Design & Implementation*, CSE 331. (Fall 2019, Winter 2020)
- *Accelerated Introduction to Programming*, CSE 143X. (Fall 2018)
- *Introduction to Programming II*, CSE 143. (Spring 2018, Winter 2019, Spring 2019)

Service

Sub–reviewer, FAccT (2023)	2023
Student Volunteer, NAACL (2022), Mobicom (2019)	2019, 2022
Student Leader, Carnegie Mellon University, School of Computer Science	2022 – 2023

- *Student Representative*, CMU Software Engineering Ph.D. Curriculum Committee (2022, 2023)
- *Student Representative*, CMU S3D Distinguished Speaker Series Selection Committee (2022, 2023)
- *Member*, CMU S3D Software Research Seminar Steering Committee (2022, 2023)
- *Member*, CMU SCS Dean's Advisory Committee (2022)

Student Leader, University of Washington, Computer Science & Engineering	2019 – 2021

- *Member*, UW CSE Student Advisory Council (2021)
- *Undergraduate Research Leader*, UW Undergraduate Research Program (2021)
- *Vice Chair*, UW CSE Student Advisory Council (2020)
- *Officer*, UW CSE Student Advisory Council (2019)

Industry Experience

Uber, Developer Experience, Software Engineer Intern	Fall 2019
Apple, Mail Team, Software Engineer Intern	Summer 2019
Microsoft, Personal Bing, Software Engineer Intern	Spring 2019
Microsoft, Exchange Enterprise Cloud, Software Engineer Intern	Summer 2018
Microsoft, Workplace Analytics, Software Engineer Intern	Summer 2017
Microsoft, Office 365, Intern	Summer 2016