Jenny T. Liang

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

✉ jtliang@cs.cmu.edu • 🌐 jennyliang.me • ☺ liang-jenny • 🐦 jennytliang

Education

2022 –	**Carnegie Mellon University**, Pittsburgh, PA, USA Ph.D. in Software Engineering *(GPA: 4.00)*
2015 – 2021	**University of Washington**, Seattle, WA, USA B.S. in Computer Science, B.S. in Informatics *(GPA: 3.77)*

Publications (* denotes equal contribution, ♂ Google Scholar)

Refereed Conference Publications

ICSE'24 **[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 2024. [PDF]

ACL'23 **[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 2023. [PDF]
🏆 *Outstanding Paper Award*

ICSE'23 **[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 2023. [PDF]
🏆 *ACM SIGSOFT Distinguished Paper Award*

ESEC/FSE'22 **[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 2022. [PDF]

ICSE-NIER'22 **[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 2022. [PDF]

CHI'22 **[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. [PDF]

VL/HCC'21 **[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 2021. [PDF]

WWW'21 **[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 2021. [PDF]

Mobicom'19 **[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 2019. [PDF]

Mobicom'19

Other Refereed Publications *(e.g., demos, posters)*

[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 2019. [[PDF](#)]

ArXiv
pre-print

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. [[PDF](#)]

Research Experience

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

Awards & Honors

2023	**Outstanding Paper Award,** Annual Conference of the Association for Computational Linguistics 2023. *Awarded to less than 2% of papers accepted to the conference.*
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.*
2021	**Outstanding Undergraduate Researcher Honorable Mention,** Computing Research Association
2020	**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)

Fellowships

2023	**Ford Fellow Honorable Mention,** Ford Foundation
2021 – 2022	**Graduate Research Fellow,** National Science Foundation ($111,000 over 3 years)

Presentations

Talks

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

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

Nov 2022 — **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

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

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

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

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

Posters, Demos, & Other Talks

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

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

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

Selected Press

Nov 2021	**New York Times,** ["Can a Machine Learn Morality?"](#)
Oct 2021	**WIRED,** ["This Program Can Give AI a Sense of Ethics—Sometimes."](#)

Teaching

Spring 2020	**Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering *[Building Academic Success through Bottom–Up Computing (Introduction to Computer Systems)](), CSE 390B.* Instructors: Dan Grossman, Aaron Johnston, Leslie Ikeda
Winter 2020	**Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering *[Software Design & Implementation](), CSE 331.* Instructor: Hal Perkins
Fall 2019	**Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering *[Software Design & Implementation](), CSE 331.* Instructor: Dan Grossman
Winter 2019	**Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering *[Introduction to Programming II, CSE 143]().* Instructor: Hunter Schafer
Fall 2018	**Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering *[Accelerated Introduction to Programming](), CSE 143X.* Instructor: Stuart Reges
Spring 2018	**Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering *[Introduction to Programming II](), CSE 143.* Instructor: Stuart Reges

Service

Sub-reviewer	FAccT (2023)
Volunteer	NAACL (2022), Mobicom (2019)
Student Leader	*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) *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

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