# Jenny T. Liang

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## Education

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

## Publications (* denotes equal contribution, ♃ Google Scholar)

### *Refereed Conference Publications*

ICSE'24   **[12] 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   **[11] 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   **[10] 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   **[9] 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   **[8] 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   **[7] 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   **[6] 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   **[5] 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   **[4] 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]

**_Other Refereed Publications_** _(e.g., demos, posters)_

Mobicom'19    **[3] 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]]

**_Pre-Prints_**

ArXiv
pre-print    **[2] 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]]

ArXiv
pre-print    *[1] LLMs as Workers in Human-Computational Algorithms? Replicating Crowdsourcing Pipelines with LLMs*
Tongshuang Wu, Haiyi Zhu, Maya Albayrak, Alexis Axon, Amanda Bertsch, Wenxing Deng, Ziqi Ding, Bill Guo, Sireesh Gururaja, Tzu-Sheng Kuo, **Jenny T. Liang**, Ryan Liu, Ihita Mandal, Jeremiah Milbauer, Xiaolin Ni, Namrata Padmanabhan, Subhashini Ramkumar, Alexis Sudjianto, Jordan Taylor, Ying-Jui Tseng, Patricia Vaidos, Zhijin Wu, Wei Wu, Chenyang Yang. [[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   **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

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

## Teaching

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| Spring 2020 | **Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering<br>*[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<br>*[Software Design & Implementation](#), CSE 331.* Instructor: Hal Perkins |
| Fall 2019 | **Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering<br>*[Software Design & Implementation](#), CSE 331.* Instructor: Dan Grossman |
| Winter 2019 | **Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering<br>*[Introduction to Programming II, CSE 143](#).* Instructor: Hunter Schafer |
| Fall 2018 | **Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering<br>*[Accelerated Introduction to Programming](#), CSE 143X.* Instructor: Stuart Reges |
| Spring 2018 | **Undergraduate Teaching Assistant,** University of Washington, Computer Science & Engineering<br>*[Introduction to Programming II](#), CSE 143.* Instructor: Stuart Reges |

## Service

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| Sub-reviewer | FAccT (2023) |
| Volunteer | NAACL (2022), Mobicom (2019) |
| Student Leader | *Student Representative*, CMU Software Engineering Ph.D. Curriculum Committee (2022, 2023)<br>*Student Representative*, CMU S3D Distinguished Speaker Series Selection Committee (2022, 2023)<br>*Member*, CMU S3D Software Research Seminar Steering Committee (2022, 2023)<br>*Member*, CMU SCS Dean's Advisory Committee (2022)<br>*Member*, UW CSE Student Advisory Council (2021)<br>*Undergraduate Research Leader*, UW Undergraduate Research Program (2021)<br>*Vice Chair*, UW CSE Student Advisory Council (2020)<br>*Officer*, UW CSE Student Advisory Council (2019) |

## Industry Experience

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| 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