

# Jenny T. Liang

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## Education

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

2022 – Present

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

2015 – 2021

## Publications (\* denotes equal contribution, [Google Scholar](#))

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### Refereed Conference Papers

#### [C8] NLPositionality: Characterizing Design Biases of Datasets and Models

S. Santy\*, [J.T. Liang](#)\*, R. Le Bras, K. Reinecke, M. Sap

*Annual Conference of the Association for Computational Linguistics (ACL) 2023*

#### [C7] A Qualitative Study on the Implementation Design Decisions of Developers

[J.T. Liang](#), M. Arab, M. Ko, A.J. Ko, T.D. LaToza

*IEEE/ACM International Conference on Software Engineering (ICSE) 2023*

 *ACM SIGSOFT Distinguished Paper Award*

#### [C6] Understanding Skills of OSS Contributors on GitHub

[J.T. Liang](#), T. Zimmermann, D. Ford

*ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) 2022*

#### [C5] Towards Mining OSS Skills from GitHub Activity

[J.T. Liang](#), T. Zimmermann, D. Ford

*IEEE/ACM International Conference on Software Engineering—New Ideas and Emerging Results (ICSE–NIER) 2022*

#### [C4] An Exploratory Study of Sharing Strategic Programming Knowledge

M. Arab, T.D. LaToza, [J. Liang](#), A.J. Ko

*ACM SIGCHI Conference on Human Factors in Computing Systems (CHI) 2022*

#### [C3] HowToo: A Platform for Sharing, Finding, and Using Programming Strategies

M. Arab, [J. Liang](#)\*, Y.K. Yoo\*, A.J. Ko, T.D. LaToza

*IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC) 2021*

#### [C2] Whale Watching in Inland Indonesia: Analyzing a Small, Remote, Internet-Based Community Cellular Network

M. Johnson, [J. Liang](#), M. Lin, S. Singanamalla, K. Heimerl

*The Web Conference (WWW) 2021*

#### [C1] Experiences: Design, Implementation, and Deployment of CoLTE, a Community LTE Solution

S. Sevilla, M. Johnson, P. Kosakanchit, [J. Liang](#), K. Heimerl

*ACM International Conference on Mobile Computing and Networking (Mobicom) 2019*

### Demos

#### [D1] An All-in-One Community LTE Network

S. Sevilla, M. Johnson, P. Kosakanchit, [J. Liang](#), K. Heimerl

*ACM International Conference on Mobile Computing and Networking (Mobicom) 2019*

## ***In Submission***

### **[S2] Understanding the Usability of AI Programming Assistants**

J.T. Liang, C. Yang, B.A. Myers

### **[S1] Delphi: Towards Machine Ethics and Norms**

L. Jiang, J.D. Hwang, C. Bhagavatula, R. Le Bras, J. Liang, S. Levine, J. Dodge, K. Sakaguchi, M. Forbes, T. Sorenson, J. Borchardt, J. Hessel, S. Gabriel, Y. Tsvetkov, O. Etzioni, M. Sap, R. Rini, Y. Choi

## **Research Experience**

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

## **Awards, Honors, & Fellowships**

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<b>Ford Fellow Honorable Mention</b> , Ford Foundation	2023
<b>ACM SIGSOFT Distinguished Paper Award</b> , IEEE/ACM International Conference on Software Engineering 2023. <i>Awarded to less than 5% of papers accepted to the conference.</i>	2023
<b>Graduate Research Fellow</b> , National Science Foundation (\$111,000 over 3 years)	2021
<b>Outstanding Undergraduate Researcher Honorable Mention</b> , Computing Research Association	2021
<b>Undergraduate Service Award</b> , University of Washington, Computer Science & Engineering. <i>Award to recognize 3 UW CSE undergraduates out of 2,000 students for their outstanding service to the department.</i>	2020
<b>Husky 100</b> , University of Washington. <i>Award to recognize 100 UW students out of 55,000 students in honor of their outstanding contributions to the university.</i>	2020
<b>Outstanding Engineer Award</b> , Allen Institute for Artificial Intelligence (\$12,000)	2020

## Presentations

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### Talks

- A Qualitative Study on the Implementation Design Decisions of Developers** May 2023  
*IEEE/ACM International Conference on Software Engineering (ICSE) 2023, Melbourne, Australia*
- Understanding Skills of OSS Contributors on GitHub** Nov 2022  
*ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) 2022, Singapore*
- Towards Mining OSS Skills from GitHub Activity** May 2022  
*IEEE/ACM International Conference on Software Engineering (ICSE) 2022, Pittsburgh, PA, USA*
- Understanding Skills for OSS Communities** (Invited talk) Sep 2021  
*Microsoft Research, Redmond, WA, USA*
- Interpreting Hate Speech Classifiers: Does Dataset Label Space Matter?** May 2021  
*UW Undergraduate Research Symposium, Seattle, WA, USA*
- Explicit Programming Strategies** May 2020  
*UW Undergraduate Research Symposium, Seattle, WA, USA*

### Posters & Demos

- A Qualitative Study on the Implementation Design Decisions of Developers** (Poster) May 2023  
*IEEE/ACM International Conference on Software Engineering (ICSE) 2023, Melbourne, Australia*
- Towards Mining OSS Skills from GitHub Activity** (Poster) May 2022  
*IEEE/ACM International Conference on Software Engineering (ICSE) 2022, Pittsburgh, PA, USA*
- An All-in-One Community LTE Network** (Demo) Oct 2019  
*ACM International Conference on Mobile Computing and Networking (Mobicom) 2019, Los Cabos, Mexico*

## Selected Press

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

## Teaching

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- 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

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- Sub-reviewer**, FAccT (2023) 2023

<b>Student Volunteer</b> , NAACL (2022), Mobicom (2019)	2019, 2022
<b>Student Leader</b> , Carnegie Mellon University, School of Computer Science <i>Student Representative</i> , CMU Software Engineering Ph.D. Curriculum Committee (2022, 2023) <i>Student Representative</i> , CMU S3D Distinguished Speaker Series Selection Committee (2022, 2023) <i>Member</i> , CMU S3D Software Research Seminar Steering Committee (2022, 2023) <i>Member</i> , CMU SCS Dean's Advisory Committee (2022)	2022 – 2023
<b>Student Leader</b> , University of Washington, Computer Science & Engineering <i>Member</i> , UW CSE Student Advisory Council (2021) <i>Undergraduate Research Leader</i> , UW Undergraduate Research Program (2021) <i>Vice Chair</i> , UW CSE Student Advisory Council (2020) <i>Officer</i> , UW CSE Student Advisory Council (2019)	2019 – 2021

## Industry Experience

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