

# Jenny T. Liang

Ph.D. Student

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Software & Societal Systems Department

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*I research ways to make programming better for everyone by studying developers and programming communities as well as designing intelligent tools that make building software easier.*

## Education

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

2022 -

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

2015 - 2021

## Peer-Reviewed Publications (\* denotes equal contribution, ★ denotes award-winning paper)

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### ★ 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. To appear.

### 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

### 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

### 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

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

M. Arab, J. Liang\*, Y.K. Yoo\*, A.J. Ko, T.D. LaToza

Visual Languages and Human-Centric Computing (VL/HCC) 2021

### 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

### 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

### 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

## Preprints (\* denotes equal contribution)

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### Measuring Positionality and Design Biases in Datasets and Models in NLP

S. Santy\*, J.T. Liang\*, R. Le Bras, K. Reinecke, M. Sap

Under submission.

*Last updated: January 22, 2023*

## Delphi: Towards Machine Ethics and Norms

L. Jiang, J.D. Hwang, C. Bhagavatula, R. Le Bras, **J. Liang**, J. Dodge, K. Sakaguchi, M. Forbes, J. Borchardt, S. Gabriel, Y. Tsvetkov, O. Etzioni, M. Sap, R. Rini, Y. Choi  
Under submission. [arXiv preprint arXiv:2110.07574](https://arxiv.org/abs/2110.07574).

## Research Experience

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

## Awards & Honors

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<b>ACM SIGSOFT Distinguished Paper Award</b> , IEEE/ACM International Conference on Software Engineering 2023 Awarded to less than 5% of papers accepted to the conference.	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 Award to recognize 3 UW CSE undergraduates out of 2,000 students for their outstanding service to the department.	2020
<b>Husky 100</b> , University of Washington Award to recognize 100 UW students out of 55,000 students in honor of their outstanding contributions to the university.	2020
<b>Outstanding Engineer Award</b> , Allen Institute for Artificial Intelligence (\$12,000)	2020
<b>Denice Dee Denton Scholarship</b> , University of Washington, Computer Science & Engineering (\$1,000)	2019
<b>UW Academy Scholar</b> , UW Robinson Center Early entrance to the University of Washington at 16 years old.	2015

## Invited Talks

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<b>Towards Mining OSS Skills from GitHub Activity</b> (Poster) IEEE/ACM International Conference on Software Engineering 2022, Pittsburgh, PA, USA	05/2022
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*Last updated: February 23, 2023*

<b>Understanding Skills for OSS Communities</b> (Talk) Microsoft Research, Redmond, WA, USA	09/2021
<b>Interpreting Hate Speech Classifiers: Does Dataset Label Space Matter?</b> (Talk) UW Undergraduate Research Symposium, Seattle, WA, USA	05/2021
<b>Explicit Programming Strategies</b> (Talk) UW Undergraduate Research Symposium, Seattle, WA, USA	05/2020
<b>An All-in-One Community LTE Network</b> (Demo) ACM International Conference on Mobile Computing and Networking 2019, Los Cabos, Baja California Sur, Mexico	09/2019

## Selected Press

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<b>WIRED</b> , <a href="#">“This Program Can Give AI a Sense of Ethics—Sometimes.”</a>	10/2021
<b>New York Times</b> , <a href="#">“Can a Machine Learn Morality?”</a>	11/2021

## Teaching

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<b>Undergraduate Teaching Assistant</b> , University of Washington, Computer Science & Engineering Building Academic Success through Bottom-Up Computing (Introduction to Computer Systems), CSE 391B. (Sp 2020) Software Design & Implementation, CSE 331. (Au 2019, Wi 2020) Accelerated Introduction to Programming, CSE 143X. (Au 2018) Introduction to Programming II, CSE 143. (Sp 2018, Wi 2019, Sp 2019)	2018 - 2020
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## Service

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<b>Student Leader</b> , Carnegie Mellon University, School of Computer Science Student Representative, CMU Software Engineering Ph.D. Curriculum Committee (2022) Student Representative, CMU S3D Distinguished Speakers Series Selection Committee (2022) Member, CMU S3D Software Research Seminar Steering Committee (2022) Member, CMU SCS Dean's Advisory Committee (2022)	2022
<b>Conference Volunteer</b> Student Volunteer, NAACL (2022) Student Volunteer, Mobicom (2019)	2019, 2022
<b>Student Leader</b> , University of Washington, Computer Science & Engineering 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)	2019 - 2021

## Industry Experience

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<b>Uber</b> , Developer Experience, Software Engineer Intern	2019
<b>Apple</b> , Mail Team, Software Engineer Intern	2019
<b>Microsoft</b> , Personal Bing, Software Engineer Intern	2019
<b>Microsoft</b> , Exchange Enterprise Cloud, Software Engineer Intern	2018

*Last updated: February 23, 2023*

**Microsoft**, Workplace Analytics, Software Engineer Intern

2017

**Microsoft**, Office 365, Intern

2016