

# Jenny T. Liang

Ph.D. Student

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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

## Publications (\* denotes equal contribution)

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### *Refereed Conference Papers*

#### **[C8] NLPositionality: Measuring Positionality and Design Biases in Datasets and Models in NLP**

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

*Annual Conference of the Association for Computational Linguistics (ACL). To appear.*

#### **[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

*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

## Under 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>Microsoft Research</b> , Developer Velocity Lab Research Intern, advised by Chris Bird, Carmen Badea, Thomas Zimmermann, and Nicole Forsgren	2023
<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>Ford Fellow Honorable Mention</b> , Ford Foundation	2023
<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>UW Academy Scholar</b> , UW Robinson Center Early entrance to the University of Washington at 16 years old.	2015

## Invited Talks

<b>A Qualitative Study on the Implementation Design Decisions of Developers</b> (Poster) <i>IEEE/ACM International Conference on Software Engineering (ICSE) 2023</i> , Melbourne, Australia	05/2023
<b>Towards Mining OSS Skills from GitHub Activity</b> (Poster) <i>IEEE/ACM International Conference on Software Engineering (ICSE) 2022</i> , Pittsburgh, PA, USA	05/2022
<b>Understanding Skills for OSS Communities</b> (Talk) <i>Microsoft Research</i> , Redmond, WA, USA	09/2021
<b>Interpreting Hate Speech Classifiers: Does Dataset Label Space Matter?</b> (Talk) <i>UW Undergraduate Research Symposium</i> , Seattle, WA, USA	05/2021
<b>Explicit Programming Strategies</b> (Talk) <i>UW Undergraduate Research Symposium</i> , Seattle, WA, USA	05/2020
<b>An All-in-One Community LTE Network</b> (Demo) <i>ACM International Conference on Mobile Computing and Networking (Mobicom) 2019</i> , Los Cabos, Baja California Sur, Mexico	09/2019

## Selected Press

<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

<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

<b>Sub-reviewer</b> , FAcCT (2023)	2023
<b>Student Volunteer</b> , NAACL (2022), Mobicom (2019)	2019, 2022

<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 Speaker Series Selection Committee (2022) Member, CMU S3D Software Research Seminar Steering Committee (2022) Member, CMU SCS Dean's Advisory Committee (2022)	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
<b>Microsoft</b> , Workplace Analytics, Software Engineer Intern	2017
<b>Microsoft</b> , Office 365, Intern	2016