

Jenny T. Liang

Ph.D. Student

Carnegie Mellon University
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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

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)

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

Microsoft Research , Developer Velocity Lab Research Intern, advised by Chris Bird, Carmen Badea, Thomas Zimmermann, and Nicole Forsgren	2023
Carnegie Mellon University , Software & Societal Systems Department Graduate Research Assistant, advised by Brad A. Myers	2022 –
Allen Institute for Artificial Intelligence , Mosaic Team Predoctoral Young Investigator, advised by Ronan Le Bras and Yejin Choi	2021 – 2022
University of Washington , Information School, Code & Cognition Lab Undergraduate Research Assistant, advised by Amy J. Ko	2020 – 2021
Microsoft Research , Software Analysis & Intelligence (SAINTES) Group Undergraduate Research Intern, advised by Denae Ford Robinson and Thomas Zimmermann	2021
Allen Institute for Artificial Intelligence , Mosaic Team Undergraduate Research Intern, advised by Swabha Swayamdipta, Chandra Bhagavatula, and Yejin Choi	2020 – 2021
University of Washington , 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

Ford Fellow Honorable Mention , Ford Foundation	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.	2023
Graduate Research Fellow , National Science Foundation (\$111,000 over 3 years)	2021
Outstanding Undergraduate Researcher Honorable Mention , Computing Research Association	2021
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)	2020
UW Academy Scholar , UW Robinson Center Early entrance to the University of Washington at 16 years old.	2015

Presentations

Talks

A Qualitative Study on the Implementation Design Decisions of Developers (Talk) <i>IEEE/ACM International Conference on Software Engineering (ICSE) 2023</i> , Melbourne, Australia	05/2023
Understanding Skills of OSS Contributors on GitHub (Talk) <i>ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) 2022</i> , Singapore	10/2022
Towards Mining OSS Skills from GitHub Activity (Talk) <i>IEEE/ACM International Conference on Software Engineering (ICSE) 2022</i> , Pittsburgh, PA, USA	05/2022
Understanding Skills for OSS Communities (Invited talk) <i>Microsoft Research</i> , Redmond, WA, USA	09/2021
Interpreting Hate Speech Classifiers: Does Dataset Label Space Matter? (Talk) <i>UW Undergraduate Research Symposium</i> , Seattle, WA, USA	05/2021
Explicit Programming Strategies (Talk) <i>UW Undergraduate Research Symposium</i> , Seattle, WA, USA	05/2020

Posters & Demos

A Qualitative Study on the Implementation Design Decisions of Developers (Poster) <i>IEEE/ACM International Conference on Software Engineering (ICSE) 2023</i> , Melbourne, Australia	05/2023
Towards Mining OSS Skills from GitHub Activity (Poster) <i>IEEE/ACM International Conference on Software Engineering (ICSE) 2022</i> , Pittsburgh, PA, USA	05/2022
An All-in-One Community LTE Network (Demo) <i>ACM International Conference on Mobile Computing and Networking (Mobicom) 2019</i> , Los Cabos, Baja California Sur, Mexico	09/2019

Selected Press

WIRED , "This Program Can Give AI a Sense of Ethics—Sometimes."	10/2021
New York Times , "Can a Machine Learn Morality?"	11/2021

Teaching

Undergraduate Teaching Assistant, University of Washington, Computer Science & Engineering Building Academic Success through Bottom-Up Computing (Introduction to Computer Systems), CSE 391B. (Sp 2020) 2018 – 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)

Service

Sub-reviewer, FAccT (2023) 2023

Student Volunteer, NAACL (2022), Mobicom (2019) 2019, 2022

Student Leader, Carnegie Mellon University, School of Computer Science 2022
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)

Student Leader, University of Washington, Computer Science & Engineering 2019 – 2021
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

Uber, Developer Experience, Software Engineer Intern 2019

Apple, Mail Team, Software Engineer Intern 2019

Microsoft, Personal Bing, Software Engineer Intern 2019

Microsoft, Exchange Enterprise Cloud, Software Engineer Intern 2018

Microsoft, Workplace Analytics, Software Engineer Intern 2017

Microsoft, Office 365, Intern 2016