

Jenny T. Liang

Ph.D. Student

Carnegie Mellon University
School of Computer Science
Software and Societal Systems Department

jtliang@cs.cmu.edu
www.jennyliang.me
[@jennytliang](https://twitter.com/jennytliang)

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	2022 -
University of Washington , Seattle, WA, USA B.S. in Computer Science, B.S. in Informatics (GPA: 3.77)	2015 - 2021

Research Experience

Carnegie Mellon University , Human-Computer Interaction Institute, Natural Programming Project Graduate Research Assistant, advised by Brad A. Myers	2022 -
Allen Institute of 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 - 2022
Microsoft Research , Software Analysis and Intelligence (SAINTES) Group Undergraduate Research Intern, advised by Denae Ford Robinson and Thomas Zimmermann	2021
Allen Institute of 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

National Science Foundation Graduate Research Fellow (\$111,000 over 3 years)	2021
Computing Research Association Outstanding Undergraduate Researcher Honorable Mention	2020
University of Washington Computer Science & Engineering Undergraduate Service Award Award to recognize 3 UW CSE undergraduates out of 2,000 students for their outstanding service to the department.	2020
Husky 100 Award to recognize 100 UW students out of 55,000 students in honor of their outstanding contributions to the university.	2020
Allen Institute of Artificial Intelligence Outstanding Engineer (\$12,000)	2019
Denice Dee Denton Scholarship (\$1,000) Departmental scholarship for students who show a commitment to a diverse student population.	2019

UW Academy Scholar

Early entrance to the University of Washington at 16 years old.

2015

Funding

SIGSOFT CAPS Travel Grant for ESEC/FSE 2022 (\$1,000)	2022
NSF Student & Early-Career Faculty Travel Grant for ICSE 2022 (\$1,075)	2022
UW CSE Travel Award for SIGCSE 2020 (\$500)	2020
N2Women Travel Grant for Mobicom 2019 (\$1,200)	2019
UW CSE Travel Award for Grace Hopper Conference 2019 (\$1,200)	2019

Peer-Reviewed Publications (* denotes equal contribution)

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

A Qualitative Study on the Implementation Design Decisions of Software Developers

J.T. Liang, M. Arab, M. Ko, A.J. Ko, T.D. LaToza

Under submission.

Delphi: Towards Machine Ethics and Norms

L. Jiang, J.D. Hwang, C. Bhagavatula, R. Le Bras, M. Forbes, J. Borchardt, J. Liang, O. Etzioni, M. Sap, Y. Choi

Under submission. [arXiv preprint arXiv:2110.07574](https://arxiv.org/abs/2110.07574).

Invited Talks

Towards Mining OSS Skills from GitHub Activity (Poster) IEEE/ACM International Conference on Software Engineering 2022, Pittsburgh, PA, USA.	05/2022
Understanding Skills for OSS Communities (Talk) Microsoft Research, Redmond, WA, USA.	09/2021
Interpreting Hate Speech Classifiers: Does dataset label space matter? (Talk) UW Undergraduate Research Symposium, Seattle, WA, USA.	05/2021
Explicit Programming Strategies (Talk) UW Undergraduate Research Symposium, Seattle, WA, USA.	05/2020
An All-in-One Community LTE Network (Demo) ACM International Conference on Mobile Computing and Networking 2019, Los Cabos, 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) 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
--	-------------

Service

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

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