

TONY W. LI

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EDUCATION

University of Washington

Seattle, WA

Master of Science (MS) in Human Centered Design and Engineering (HCDE)

June 2023 (*Anticipated*)

- Directed Research Group with Elin Björling, Maya Cakmak, and Patrícia Alves-Oliveira: Project EMAR - research and software-hardware integration for a social robot and end-user programming platform to measure adolescent stress
- Directed Research Group with Cecilia Aragon, Bernease Herman, and Sarah Evans: Research Design for Games to Teach Data Ethics - research game designs for ethics and diversity education in data science
- Research with Amy Zhang: Social Futures Lab - projects on UX collaboration tooling analysis and crowdsourced video annotation tooling
- HCDE Graduate Student Association (President, 2022-2023) - organized and coordinated social and professional events for nearly 300 HCDE graduate students
- **Completed HCDE Courses:** User-Centered Design, Theoretical Foundations of HCDE, Experimental Research Methods, Usability Studies, User-Centered Web Design, Interaction Design Prototyping, Designing for Behavior Change

Harvard University

Cambridge, MA

Bachelor of Arts (AB) in Computer Science, Secondary (Minor) in Statistics

May 2017

- Best Overall Final Project in Data Science (CS109) class, on "Textual Partisanship"
- Teaching Fellow for Data Science (CS109b) class
- 2015 Ruhr Fellow – German language study at Technische Universität Dortmund and internship at RWE in Essen
- *The Harvard Crimson* (Design Director of Staff Development, Software Engineer); Harvard Chinese Music Ensemble (President); Student IT Advisory Board; Habitat for Humanity (Phillips Brooks House Association)
- **Completed Computer Science Courses:** Data Structures and Algorithms, Machine Learning, Artificial Intelligence, Data Science, Visualization, Systems Programming and Machine Organization, Computer Graphics

RESEARCH PUBLICATIONS

- (*Planned: HRI*) **Tony W. Li**, Michael Murray, Zander Brumbaugh, Hanna Lee, Katelynn Oleson, Danielle Jo, Elin A. Björling. *Adolescent Self-Disclosure with an Online Robot* (anonymized).
- (*In Submission: CHI*) K. J. Kevin Feng, **Tony W. Li**, Amy X. Zhang. *UX Collaboration In Multiplayer Design Tools*.
- Raida Karim, Edgar Lopez, Karelynn Oleson, **Tony W. Li**, Elin A. Björling, and Maya Cakmak. *Share with Me: A Study on a Social Robot Collecting Mental Health Data*. International Conference on Social Robotics. 2022.
- **Tony W. Li**, Ofra Amir, and Barbara Grosz. *Approaches to Policy Advice From Multiple Teachers in Reinforcement Learning*. Digital Access to Scholarship at Harvard. 2017.

WORK EXPERIENCE

Facebook, Inc.

Menlo Park, CA

Data Engineer - Artificial Intelligence Data Engineering

Jan 2020 - Sept 2021

- Partnered with Facebook AI Research to source and manage data for computer vision projects, platformize visual model-free data sampling methods for Instagram images, and visualize annotation progress in an interactive dashboard
- Partnered with AI Data team to analyze and improve Facebook AI platforms with previously no data architecture
- Implemented ETL data foundations, alerting capabilities, and data visualization dashboards to track reliability, performance, efficiency, and label quality across AI Data platforms
- Designed and implemented frontend UI for internal customers to track and analyze machine learning dataset quality

Data Engineer - Ads Interfaces Data Engineering

Aug 2017 - Dec 2019

- Partnered with Product Experience Analytics to promote advertising product quality and advertiser experience
- Responsible for data ETL, central data pipelines, and data visualization dashboards for Ads org-wide goal metrics and internal Dogfooding Programs formerly with no goaling metrics or data visibility
- Implemented an automated bot to post weekly metric movements internally to relevant stakeholders
- Crafted and delivered presentations on query optimization and data visualization

Quorum Analytics, Inc.

Cambridge, MA

Software Developer

Apr 2014 - Aug 2015

- Built an online legislative strategy platform performing big data analysis of the United States Congress
- As a full stack developer, created interactive visualizations and quantitative profiles of political data

SKILLS

Programming: Python, C/C++, Web Programming (HTML/CSS/Javascript with Django/PHP), SQL (MySQL, Hive/Spark, Presto), Java, OCaml, R, Hack/PHP

Hobbies: Ultimate Frisbee, Violin, Biking, Dragonboating, Hip-Hop Dance, Acrylic Painting, Twitch Streaming