

# 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
- HCDE Graduate Student Association (President, 2022-2023)
- **Completed HCDE Courses:** User-Centered Design, Theoretical Foundations of HCDE, Experimental Research Methods, Usability Studies

### Harvard University

Cambridge, MA

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

May 2017

- Senior Thesis with Barbara Grosz and Ofra Amir: *Approaches to Policy Advice From Multiple Teachers in Reinforcement Learning* (<https://dash.harvard.edu/handle/1/38811482>)
- 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

## 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 a computer vision project, platformize visual model-free data sampling methods for Instagram images, and visualize annotation progress in an interactive dashboard
- Partnered with AI Data team on analyzing and improving 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 datasets

*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

*Data Engineer Intern - Teens*

June 2016 - Aug 2016

- Developed on a machine learning model to predict users' real unreported ages, worked on a product for students to connect in college communities, and authored an analysis project of videos teenagers watch on Facebook

### 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

**Languages:** German (4 years at Fayetteville High School, 55 hours at TU Dortmund), Mandarin Chinese (2 semesters at Harvard)

**Hobbies:** Violin, Erhu/Chinese Classical Music, Ultimate Frisbee, Dragonboating, Hip-Hop Dance, Biking, Acrylic Painting, Twitch Streaming