

## **Jia-Wei (Jessie) Liang**

<https://jessie-jwl.github.io/>

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### **Education**

#### **University of California, Davis**

Davis, CA

*Doctor of Philosophy, Computer Science (focus on Human Computer Interaction)*

Sep 2019 ~ Present

#### **Columbia University**

New York, NY

*Master of Science, Applied Analytics*

Aug 2016 ~ Aug 2017

- Coursework: research and sampling design, multivariate analysis, database architecture, data visualization

#### **National Tsing Hua University**

Hsinchu, Taiwan

*Bachelor of Science, Quantitative Finance*

Sep 2012 ~ Jun 2016

- Coursework: probability, statistical modeling, stochastic processes, portfolio management, derivatives pricing

### **Work Experiences**

#### **University of California, Davis**

Davis, CA

*Teaching Assistant*

#### **2024 Best Teaching Assistant Award**

- Algorithm Spring 2022/24
- Human Computer Interaction Winter 2023/24
- Web Programming Spring 2021

#### **Applied Materials**

Sunnyvale, CA

*Business Intelligence Analyst*

Aug 2017 ~ Sep 2019

- Spearheads the entire Chinese semiconductor market for Chemical Mechanical Planarization products
- Liaisons between sales and engineering teams; designs and manages pricing proposals and optimal tool configurations
- Analyzes clients' tool performance datasets and creates visualizations in order to provide intuitive strategies
- Sets annual revenue goals and annual tool forecasts for our manufacturing sites and suppliers

#### **Chinatrust Commercial Bank Investments**

Taipei, Taiwan

*Intern, Investment Business*

Jul 2015 ~ Aug 2015

- Composed a research proposal predicting future performances of targeted companies in the ocean shipping industry
- Improved clients' financial performances by analyzing different investment strategies on a myriad of financial vehicles

#### **Chinatrust Commercial Bank**

Taipei, Taiwan

*Intern, Personal Trust Department*

Jul 2014 ~ Aug 2014

- Reduced the customer outreach time by building and organizing databases of over 2,500 high-net-worth (HNW) clients
- Completed research papers on strategies to engage HNW clients, and proposed modifications to the banking systems

### **Collaborate Experiences**

#### **Applied Materials**

Sunnyvale, CA

- co-work with **Two Pore Guys (2PG)** June 2018 ~ Sep 2018
  - Worked with 2PG, a biotech startup to create a digital, hand-held biosensor for nanopore sequencing
- co-work with the **State University of New York (SUNY)** Oct 2017 ~ Nov 2017
  - Industry research and business forecast for future 15 years' return on the decision of establishing Materials Engineering Technology Accelerator (META Center) on the SUNY Polytechnic Institute campus in Albany

#### **American International Group (AIG)**

New York, NY

*Modelling the Total Cost of Risk (TCOR) on Product Recall Cases*

June 2017 ~ Aug 2017

- Worked with AIG to formulate effective means for better control of losses (costs) from product recalls

**Publications:**

- **Jia-Wei Liang**, Nina Amenta, *The Fairness of Redistricting Ghost* (arXiv preprint arXiv:2401.07440)
- Jingchao Fang, **Jia-Wei Liang**, Hao-Chuan Wang, *How People Initiate and Respond to Discussions Around Online Community Norms: A Preliminary Analysis on Meta Stack Overflow Discussions* (Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing)
- **Jia-Wei Liang**, Hao-Chuan Wang, *Reshaping Group Life: A Transparent and Interpretable Reward Model to Enhance Fairness in Groups* (International Conference on Collaboration Technologies and Social Computing)
- Paper in revision: *Understanding Cognitive Process of Writing Fake Review Using EEG-based and Behavioral Metrics*
- Paper in progress: *Fairness in Group Work: Ensuring Fairness in the Workload Division Process*

**Data Visualization Project:**

*Analysis on the US Baby Name Since 1910*

<https://public.tableau.com/profile/jia.wei.liang#!/vizhome/BabysnametrendinUS/Story1>

**Scholarship Awards:**

- Prestigious Towards Outstanding Postgraduate Students (TOPS) Award
- 2024 GGCS Summer PhD Fellowship

**Skill Sets**

- Language: English, Mandarin Chinese
- Programming & Software: Python, JMP, MATLAB, R, SPSS, Jupyter, SQL, Tableau, Figma