

# Jenny Ma

## CONTACT

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## INTERESTS

Generative AI, computational design, HCI, animation

## EDUCATION

Sep 2023 - MS in Computer Science, Columbia University, GPA: 4.0/4.0  
(expected 2025) Advisor: Lydia Chilton

Sep 2017 - BSE in Operations Research & Financial Engineering, Princeton University, Dept. GPA 3.7/4.0  
May 2021 Certificate in Computer Science  
Advisor: John Mulvey

## RESEARCH EXPERIENCE

Computational Design Lab, *Columbia University*  
Sep 2023 - Advisor: Lydia Chilton  
HCI and generative AI for text to image/video/audio.

Operations Research Senior Thesis, *Princeton University*  
Advisor: John Mulvey  
Sep 2020 - Estimated impact of Twitter/social media on stock prices with NLP, using sentence-BERT to find an  
Apr 2021 optimal portfolio strategy. Thesis: *Tweet Trade: Using Sentiment Analysis for Stock Movement Prediction and Portfolio Optimization*

## PUBLICATIONS

Vivian Liu, Tao Long, **Jenny Ma**, Nathan Raw, Lydia Chilton. “Generative Disco: Text-to-Video for Music Visualization.” *Under submission to DIS, 2024*

## INDUSTRY EXPERIENCE

Software Engineer, *Trunk (series a devox, ex-Uber ATG)*  
Jan 2023 - Working on Trunk Check (superlinter) team and web-app platform. Enabled *trunk check* on github PR workflows using github API. Created an onboarding wizard to help users seamlessly onboard onto Check product in the web-app ([app.trunk.io](https://app.trunk.io)). Migrated web-app from react-router to NextJS

- Software Engineer, *DoorDash*  
*Aug 2021 - Dec 2022* Worked on the alcohol product team. Integrated HSA/FSA items to DoorDash, leading design and implementation for reimbursable receipts. Implemented Dasher scanned ID verification. Added support for flexible item hours for merchants. Designed and implemented new dropoff preferences flow, consolidating SOT for user preferences across 5 core teams.
- Software Engineer Intern, *Capital One*  
*Jun 2020 - Aug 2020* Worked on Teller 2, an enterprise-wide software deployed across Capital One Financial branch locations. Integrated SSO authentication scheme to Teller 2 and created set of authentication APIs
- Software Engineer Intern, *DataVisor (UML cybersecurity startup)*  
*May 2019 - Aug 2019* Developed an internal service to detect inefficient Cassandra queries to optimize error handling time with Java and CQL. Used Cassandra tables to create data models with real-world data.

## COMPUTER SKILLS

*Languages:* Typescript, Java, C++, Python, SQL, yaml, kotlin

*Software & Tools:* React, Pytorch, Git, NextJS, gRPC, datadog, Octokit

## ACTIVITIES

- Varsity Athlete, *Princeton University Women's Swim Team*  
*Sep 2017 - May 2021* Placed 3rd and 6th for the 2018 and 2019 Ivy League Championships in the 100 Breast, 6th Place and 9th in the 200 Breast. Olympic Trials cut and ranked Top 20 nationally for both events
- Other Societies and Groups @ *Princeton University*  
 Peer Academic Advisor, *Princeton University*, Class Historian (Photographer/Videographer), Princeton Society of Women Engineers, Cannon Dial Elm