

# Xuanlin Zeng

personal website

Email : zengxuanlin@tongji.edu.cn

Mobile : +86-166-0446-3453

## EDUCATION

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- **Tongji University** Shanghai, China  
*M.S., Vehicle Engineering; GPA: 4.83/5.00 (90.4/100)* *Sept 2022 - Jun 2025*  
*Co-advised by Prof. Hong Chen and Research Prof. Lulu Guo.*
- **Jilin University** Changchun, China  
*B.Eng., Industrial Design (Vehicle Body Engineering); GPA:3.72/4.00 (90.75/100) Top 3%* *Sept 2018 - Jun 2022*

## RESEARCH EXPERIENCE

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- **Google** Mountain View, CA  
*Software Engineer* *Oct 2016 - Present*
  - **Tensorflow:** TensorFlow is an open source software library for numerical computation using data flow graphs; primarily used for training deep learning models.
  - **Apache Beam:** Apache Beam is a unified model for defining both batch and streaming data-parallel processing pipelines, as well as a set of language-specific SDKs for constructing pipelines and runners.
- **Coursera** Mountain View, CA  
*Senior Software Engineer* *Jan 2014 - Oct 2016*
  - **Notifications:** Service for sending email, push and in-app notifications. Involved in features such as delivery time optimization, tracking, queuing and A/B testing. Built an internal app to run batch campaigns for marketing etc.
  - **Nostos:** Bulk data processing and injection service from Hadoop to Cassandra and provides a thin REST layer on top for serving offline computed data online.
  - **Workflows:** Dataduct an open source workflow framework to create and manage data pipelines leveraging reusable patterns to expedite developer productivity.
  - **Data Collection:** Designed the internal survey and crowd sourcing platform which allowed for creating various tasks for crowd sourcing or embedding surveys across the Coursera platform.
  - **Dev Environment:** Analytics environment based on docker and AWS, standardized the python and R dependencies. Wrote the core libraries that are shared by all data scientists.
  - **Data Warehousing:** Setup, schema design and management of Amazon Redshift. Built an internal app for access to the data using a web interface. Dataduct integration for daily ETL injection into Redshift.
  - **Recommendations:** Core service for all recommendation systems at Coursera, currently used on the homepage and throughout the content discovery process. Worked on both offline training and online serving.
  - **Content Discovery:** Improved content discovery by building a new onboarding experience on coursera. Using this to personalize the search and browse experience. Also worked on ranking and indexing improvements.
  - **Course Dashboards:** Instructor dashboards and learner surveying tools, which helped instructors run their class better by providing data on Assignments and Learner Activity.
- **Lucena Research** Atlanta, GA  
*Data Scientist* *Summer 2012 and 2013*
  - **Portfolio Management:** Created models for portfolio hedging, portfolio optimization and price forecasting. Also creating a strategy backtesting engine used for simulating and backtesting strategies.
  - **QuantDesk:** Python backend for a web application used by hedge fund managers for portfolio management.

## SKILLS

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- **QuantSoftware Toolkit:** Open source python library for financial data analysis and machine learning for finance.
- **Github Visualization:** Data Visualization of Git Log data using D3 to analyze project trends over time.
- **Recommendation System:** Music and Movie recommender systems using collaborative filtering on public datasets.

## AWARD & HONORS

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- **Dongrong Scholarship:** Kwon Yung-ho, President of Inter-Burgo Group, Korea **2021**
- **Dean's List:** College **2021**
- **Self-improvement and self-supporting college students:** Jilin University **2021**
- **Dr. Tsang Hin-chi Fellowship:** Ministry of Education of China
- **Excellent Student:** Jilin University
- **"Challenge Cup" Innovation and Entrepreneurship Competition Second Prize:** Jilin University
- **"Internet+" Innovation and Entrepreneurship Competition Third Prize:** Jilin University
- **3D Innovative Design Competition Second Prize:** Jilin University
- **Jilin Province College Students Mathematical Contest in Modeling First Prize:** Jilin University
- **Mathematical Contest in Modeling Meritorious Winner:** ACM
- **Meritorious Winner of 2018 Mathematical Contest in Modeling:** U.S.
- **Second Prize of National College Youth Entrepreneurship Competition, China:** Top 0.09% of 150,000 **2021**
- **Excellent Graduate:** Jilin University **2022**