Mingda Li

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Work Experience

Senior Machine Learning Software Engineer 11-2022 – Present
Uber, Inc. *New York City (Remote)*

Goal: To improve Uber Eats user experience by creating machine learning models for store and item ranking models.

- Developed store ranking/item ranking models to provide user-friendly and efficient pre-checkout bundling experience, contributing **$35M** annualized Grocery Booking.
- Led the end-to-end delivery of the merchant ranking model and data pipelines, improving post-checkout bundling shopping experience, increasing **+0.51%** add-to-cart rate and **+0.37%** conversion rate in Grocery and Retail.
- Led the effort to deliver 5 auto-generated carousels in storefront collaborating with multiple teams with **+0.39%** Grocery Booking, **+0.41%** add-to-cart rate, **+0.6%** conversion rate.

Senior Machine Learning Software Engineer 08-2020 – 11-2022
Pinterest, Inc. *San Francisco, CA (Remote)*

Goal: To improve the engagement and relevance of the related pins feed and closeup stream.

- Built an end-to-end pipeline of relevance modeling improving relevance metrics by **2x%**.
- Created new labels to the multi-head ranking model powering **3x%** on product metrics and **5%** on engagement metrics.
- Proposed a two-tower model for candidate retrieval boosting engagement metrics by **5%**.
- Developed a real-time user signal increasing engagement metrics by **1-2%**.
- Migrated multiple Hadoop pipelines to Spark with both **Scala and Pyspark**.
- Enabled data logging of a stream feed and established a real-time flow for **content type distribution control**.

Machine Learning Software Engineer Intern 05-2019 – 08-2019
Facebook, Inc. *Seattle, WA*

Goal: To improve the user experience of news feed by understanding the content of the posts.

- Extend the post classification pipelines and workflows using **Hive SQL** to support Spanish.
- Train new post classifiers by using additional features and a new workflow **(AUCs are above 97%)**.
- Deliver high quality post classification models, an inspect tool, and a **GraphQL API** using **Hack**.
- Improve the performance of post classification models by label filtering and transfer learning **(98% to 99%)**.

Education

New Jersey Institute of Technology Ph.D. in CS, 09-2015 – 08-2020
University of Science and Technology of China M.S. in CS, 09-2012 – 06-2015
Harbin Institute of Technology B.S. in CS, 09-2008 – 07-2012

Technical Skills

Languages: Python, C/C++, Golang, Java, Scala, PHP/Hack, Hive SQL, Presto, GraphQL, HTML/CSS
Frameworks/Libraries: Hadoop, Spark, TensorFlow, Pytorch, Keras
Developer Tools: Git/Mercurial, Google Cloud/Amazon EC2/Microsoft Azure, VS Code, PyCharm, IntelliJ

Publications

- **Mingda Li**, William V Rapp, and Yi Chen. *Rethinking worrying about the stock market, but instead, anxious about employment.* Journal of Corporate Accounting & Finance, 2023.
- **Mingda Li**, Jinhe Shi, and Yi Chen. *Identifying Influences in Patient Decision-Making Processes in Online Health Communities.* Journal of Medical Internet Research **(JMIR)**, 2022.
- **Mingda Li**, Weiting Gao, and Yi Chen. *A Topic and Concept Integrated Model for Thread Recommendation in Online Health Communities.* The 29th ACM international Conference on Information and Knowledge Management **(CIKM)**, 2020.
- **Mingda Li**, Jinhe Shi, and Yi Chen. *Analyzing Patient Decision Making in Online Health Communities.* The 7th IEEE International Conference on Healthcare Informatics **(ICHI)**, 2019.
- Yi Shan, **Mingda Li**, and Yi Chen. *Constructing target-aware results for keyword search on knowledge graphs.* Data & Knowledge Engineering **(DKE)**, 2017.