# **Zhaoyue Cheng**

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#### **EDUCATION**

# University of Toronto, Toronto, Ontario, Canada

Master of Computer Science

2016 - 2018

• Thesis: Non Linear models over Normalized Data

Adviser: Prof. Nick Koudas

#### University of Toronto, Toronto, Ontario, Canada

Honours Bachelor of Science in Computer Science & Mathematics

2012 - 2015

■ Cumulative GPA: 4.0 / 4.0

#### WORKING EXPERIENCE

## Layer 6 AI, TD Bank Group

Senior Machine Learning Scientist

Dec 2021 - Present

Jan 2018 – Dec 2021

- Machine Learning Scientist
   Load a group of machine
  - Lead a group of machine learning engineers and scientists to work on multiple end to end applied machine learning use cases across different departments of TD Bank Group on projects related to risk, fraud, insurance, digital banking, etc.
  - Lead multiple research and applied research projects in the field of recommendation systems, natural language processing and information retrieval and publish at top machine learning conferences
  - Lead Projects on internal core framework of machine learning tools including data processing, feature engineering and explanability for large scale datasets

#### **CaseWare International Inc.**

Developer Intership

May 2014 – Dec 2014

• Design and implement automated test framework and scripts using Java

#### **PUBLICATIONS**

#### CONFERENCE PAPERS

- 1. Zhaolin Gao\*, Zhaoyue Cheng\*, Felipe Perez, Jianing Sun, Maksims Volkovs, MCL: Mixed-Centric Loss for Collaborative Filtering, In Proceedings of The Web Conference (WWW), 2022
- Jianing Sun\*, <u>Zhaoyue Cheng\*</u>, Saba Zuberi, Felipe Perez, Maksims Volkovs, HGCF: Hyperbolic Graph Convolution <u>Networks</u> for Collaborative Filtering, In Proceedings of The Web Conference (WWW), 2021
- 3. <u>Zhaoyue Cheng</u>, Nick Koudas, Efficient Construction of Nonlinear Models over Normalized Data, <u>In IEEE International Conference on Data Engineering (ICDE)</u>, 2021
- 4. Jinpeng Zhou\*, Zhaoyue Cheng\*, Felipe Perez, Maksims Volkovs, TAFA: two-headed attention fused autoencoder for context-aware recommendations, In ACM Conference on Recommender Systems (RecSys), 2020
- 5. Zhaoyue Cheng, Nick Koudas, Nonlinear models over normalized data, In IEEE International Conference on Data Engineering (ICDE), 2019

# WORKSHOP PAPERS

- Maksims Volkovs, Felipe Perez\*, <u>Zhaoyue Cheng\*</u>, Jianing Sun\*, Sajad Norouzi\*, Anson Wong\*, Pawel Jankiewicz, Barum Rho, <u>User Engagement Modeling with Deep Learning and Language Models</u>, In ACM Recommender Systems Challenge (RecSys), 2021
- 2. Maksims Volkovs, Zhaoyue Cheng, Mathieu Ravaut, Hojin Yang, Kevin Shen, Jin Peng Zhou, Anson Wong, Saba Zuberi, Ivan Zhang, Nick Frosst, Helen Ngo, Carol Chen, Bharat Venkitesh, Stephen Gou, Aidan N Gomez, Predicting Twitter Engagement With Deep Language Models, In ACM Recommender Systems Challenge (RecSys), 2020
- 3. Maksims Volkovs, Anson Wong, Zhaoyue Cheng, Felipe Pérez, Ilya Stanevich, Yichao Lu, Robust contextual models for in-session personalization, In ACM Recommender Systems Challenge (RecSys), 2019
- 4. Maksims Volkovs, Himanshu Rai, <u>Zhaoyue Cheng</u>, Ga Wu, Yichao Lu, Scott Sanner, Two-stage model for automatic playlist continuation at scale, In ACM Recommender Systems Challenge (RecSys), 2018

<sup>\*</sup> denotes equal contribution

#### **COMPETITIONS**

- Machine Learning Competitions
  - 1. 1'st place in 2018 ACM RecSys Challenge (hosted by Spotify)
  - 2. 2'nd place in 2019 ACM RecSys Challenge (hosted by Trivago)
  - 3. 2'nd place in 2020 ACM RecSys Challenge (hosted by Twitter)
  - 4. 3'rd place in 2021 ACM RecSys Challenge (hosted by Twitter)
  - 5. 4'th place in 2019 WSDM Spotify Sequential Skip Prediction Challenge (hosted by Spotify)

#### **SKILLS**

Programming Languages

Python, Java, Scala, R, Matlab, SAS

Python Frameworks:

Pytorch, XGBoost, PySpark, Tensorflow, Scikit-learn, LightGBM

■ Developer Tools:

SQL, Git, Docker, Bash, Vim

Languages

English, Mandarin

# ACADEMIC HONORS & AWARDS

# **University of Toronto**

Graduation Award in Computer & Mathematical Sciences

2016

For top one graduating student from a Computer & Mathematics program on the basis of academic achievement

University of Toronto Scholar

2012, 2013, 2014, 2015

For students who achieved 4.0 GPA in each academic year

Dean's Honor List

2012, 2013, 2014, 2015

For students attaining an annual GPA of at least 3.70

• A.D.Allen Scholarships

2013

For the outstanding student in each year in any field of study

• Jiangsu Scholarship of University of Toronto at Scarborough, Green Path Program

2012

For 2 out of 250 students in the program