Zhaoyue Cheng

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EDUCATION

University of Toronto, Toronto, Ontario, Canada
- Master of Computer Science 2016 – 2017
- 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 – Jun 2022
- Machine Learning Scientist Jan 2018 – Dec 2021
  - 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
2. Jianing Sun*, Zhaoyue Cheng*, Saba Zuberi, Felipe Perez, Maksims Volkovs, HGCF: Hyperbolic Graph Convolution Networks for Collaborative Filtering, In Proceedings of The Web Conference (WWW), 2021
3. Zhaoyue Cheng, Nick Koudas, Efficient Construction of Nonlinear Models over Normalized Data, In IEEE International Conference on Data Engineering (ICDE), 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

1. Maksims Volkovs, Felipe Perez*, Zhaoyue Cheng*, Jianing Sun*, Sajad Norouzi*, Anson Wong*, Pawel Jankiewicz, Barum Rho, User Engagement Modeling with Deep Learning and Language Models, 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, Zhaoyue Cheng, Ga Wu, Yichao Lu, Scott Sanner, Two-stage model for automatic playlist continuation at scale, In ACM Recommender Systems Challenge (RecSys), 2018

***** 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, C++, 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