# **Deming Sheng**

Room 9054, Hock Plaza, Duke University, Durham, NC 27705, USA

(+1) 9195994241 ♦ deming.sheng@duke.edu ♦ Academic Homepage ♦ LinkedIn ♦ Google Scholar

## **Research Topics**

Machine Learning, Survival Analysis, Natural Language Processing, Recommender Systems.

## **Technical Skills**

Computer Programming: Python, Java, C++, MATLAB. Machine Learning Frameworks: Pytorch and TensorFlow

Web Development: Vue.js, HTML/CSS/JS, WeChat Mini Program

#### Education

## Duke University, the United States

09.2024 - Now

Ph.D. student in Electrical and Computer Engineering (Duke PhD Fellowship), GPA 4.0/4.0.

## King Abdullah University of Science and Technology, Saudi Arabia

08.2023 - 08.2024

Ph.D. student in Bioengineering (KAUST PhD Fellowship), GPA 4.0/4.0.

## Wuhan University of Technology, China

09.2019 - 06.2022

Master of Engineering. Major in Software Engineering, GPA 92.03% (Rank:1/71).

President of the College's Science and Technology Association.

## Wuhan University of Technology, China

09.2015 - 06.2019

Bachelor of Engineering. Major in Software Engineering.

#### Work Experience

# Industrial and Commercial Bank of China (ICBC), Hangzhou, China

07.2022 - 05.2023

Financial Technology Assistant Manager (Financial Systems QA Engineer)

**Awards**: Excellent Cadre (Top 4%, Study Secretary of new employees), Excellent New Employee and Best Apprentice Award of ICBC (Top 1 of ICBC Product Department).

#### **Publications**

- **Deming Sheng** and Ricardo Henao. Two Paths, One Goal: PAIC Guarantees and MMD–ALD for Well-Calibrated Classification. **Under Review**
- **Deming Sheng** and Ricardo Henao. Learning Survival Distributions with Individually Calibrated Asymmetric Laplace Distribution. **Under Review**
- Deming Sheng and Ricardo Henao. Learning Survival Distributions with the Asymmetric Laplace Distribution. ICML 2025 (CORE A\*, Poster)
- **Deming Sheng**, Jingling Yuan, Qing Xie, Lin Li. ACMF: An Attention Collaborative Extended Matrix Factorization Model for MOOC Services. **FGCS 2022 (JCR Q1, IF=7.307)**
- **Deming Sheng**, Jingling Yuan, Xin Zhang. Grasping or Forgetting? MAKT: A Dynamic Model via Multi-head Self-Attention for Knowledge Tracing. **SEKE 2021 (CORE B, Oral)**
- Deming Sheng, Jingling Yuan, Xin Zhang. How MOOC Videos Affect Dropout? A Lightweight Pipeline Making Student Dropout Interpretable From Several Levels. SEKE 2021 (CORE B, Oral)

- **Deming Sheng** and Jingling Yuan. An Efficient Long Chinese Text Sentiment Analysis Method Using BERT-Based Models with BiGRU. **CSCWD 2021 (CORE B, Oral)**
- Deming Sheng, Jingling Yuan, Qing Xie, Pei Luo. MOOCRec: An Attention Meta-path Based Model for Top-K Recommendation in MOOC. KSEM 2020 (CORE B, Oral)

## **Projects**

- Student-Centered MOOC Teaching Resources Dynamic Adaptive Management, Hubei Province Science and Technology Support Project, Main Participant, Grant No:2015BAA072, \$56,000. 04/2021 06/2022
- Research on the Technical Route of Informatization Construction in Universities in the Next Five to Ten Years, Fundamental Research Funds for the Central Universities, Main Participant, Grant No:2020IVB069, \$7,000.

  06/2020 12/2021
- Internet Fake News Detection, Independent Innovation Research Fund Project supported by Wuhan University of Technology, Leader, Grant No:2020zy170, \$700. 01/2020 03/2021

#### Honors

#### Research Awards:

- Top Ten Outstanding Graduate Representatives of WUT (10/13678). 06/2022
- Outstanding Master's Degree Thesis of WUT (Top 2%). 05/2022
- Outstanding Master Graduate of WUT (Top 5%). 04/2022
- Outstanding Undergraduate Graduate of WUT. 06/2019

# Competitions:

- National First Prize of The 11-th China National College Student Computer Design Competition (Top 0.1%). 08/2018
- National Second Prize of The 17-th China National Postgraduate Mathematical Contest in Modeling (Top 20%).

  12/2020
- University-level Second Prize of The 5-th WUT Postgraduate Entrepreneurship Challenge. 12/2019
- University-level Third Prize of The WUT Psychological Sitcom Contest (Director). 01/2016

#### **Scholarships:**

- Duke PhD Fellowship (\$115,306 annually). 05/2024
- KAUST PhD Fellowship (\$75,000 annually, 167 people worldwide for the 2023 academic year). 03/2023
- National Scholarship for Postgraduate (\$2,900 annually, Top 0.2%).
- National Endeavor Scholarship (\$750 annually, Top 3%).
- The First Prize Scholarship of WUT x3 (\$1,700 annually). 10/2019 2021

#### **Student Services:**

- Youth May Fourth Medal of WUT (33/48555). 05/2022
- Outstanding Cadre of WUT Student Association x2 (Top 0.5%). 06/2021 2020
- Outstanding Postgraduate Student Cadre of WUT (Top 2%). 12/2021
- Merit Postgraduate Student of WUT (Top 10%). 12/2020
- Merit College Student of WUT. 11/2016

# Other Experience

• Reviewer for: Neural Computing and Applications (JCR Q1, IF=5.606). 2022 - 2024