

# RUI ZHAO

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## 🎓 EDUCATION

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**Nanyang Technological University**, Singapore 2013 – 2017

*Ph.D* in Electrical and Electronic Engineering GPA:4.85/5.0

- Doctoral studies, under adviser Dr. Kezhi Mao, included in depth studies of natural language processing and machine learning
- Real experiences of developing quantitative models to analyze large-scale data including text data, time-series sensory and financial data
- Strong oral and written communication skills with experiences in presenting research at top conferences, publishing papers and writing proposals for research funding

**Southeast University**, Nanjing, China 2008 – 2012

*B.S.* in Electronics Engineering GPA:3.82/4.0

## 👤 WORKING EXPERIENCE

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**National University of Singapore** Singapore Nov. 2018 – Now

*Part-time Lecturer* in School of Computing

- Module coordinator and lecturer of BT5153 "Topics In Business Analytics" for Master of Science in Business Analytic Program. As of AY2018/19, the course has a total of 71 students.
- The syllabus includes (but is not limited to): text mining, deep learning, data visualization, data crawling and social network analysis.

**Harveston Asset Management Pte. Ltd.** Singapore August 2018 – Now

*Quantitative Researcher*

Develop quantitative trading models

**Shopee, Sea Group** Singapore July 2017 – August 2018

*Data Scientist*

Involved in various E-commerce big-data projects

- build large-scale recommendation system for Shopee in seven countries. I am in charge of Collaborative Filtering and Deep Learning queues, which boost the CTR by 20-30%.
- build and deploy end-to-end product title categorization system based on deep learning in seller center of Shopee. Fasttext and CNN were implemented to deal with the complex category tree. In TW market, the number of API call per day is almost 200K with an accuracy over 80%.
- build chatbot system as shopping assistant. In this project, we adopted rule-based system and sequence-to-sequence model. This one was a company hackathon project, not live yet.

**Nanyang Technological University** Singapore Feb. 2017 – July 2017

*Research Fellow*

I was in charge of algorithm design for on-line news understanding system.

- build topic categorization system for on-line news
- designed topic-conditioned event detection system
- write research papers and proposals

**University of Connecticut** Storrs, CT, USA July 2012 – May 2013

*Research Assistant* Supervisor: Prof. Robert X. Gao

I was sponsored by one NSF grant which focuses on developing intelligent machine health monitoring systems.

- Designed an intelligent and effective bearing fault diagnosis system based on its vibration signal

- Proposed and implemented thermal imaging for additive manufacturing

## 🌟 CERTIFICATIONS

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CFA: Level III Passed

July 2017 – Present

## ⚙️ SKILLS

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- Programming: Python == Matlab > C++ > Java
- Platforms: Linux, OS X, Windows
- Languages: English - Fluent, Mandarin - Native speaker

## ♡ HONORS AND AWARDS

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<i>National Scholarship</i>	2009
<i>SEU Outstanding Student, Award on top 5% students</i>	2010-2012
<i>Zhangguiping Scholarship</i>	2011
<i>Best Undergraduate Thesis Award of JiangSu Province</i>	2012
<i>NTU Research Scholarship</i>	2013-2017
<i>Best Paper Award, ICST</i>	2016

## 🔧 PATENT

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»Ruqiang Yan, **Rui Zhao**: *An Embedded Bearing Fault Diagnosis System Based on ARM and FPGA*. CN 102445343A.

## 📄 SELECTED PUBLICATIONS

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My full publication (H Index of 15) could be found in:

<https://scholar.google.co.in/citations?user=u4hCFPIAAAAJ&hl=en>

»**Rui Zhao**, Kezhi Mao: *Fuzzy Bag-of-words Model for Document Representation*. IEEE Transactions on Fuzzy Systems, 2018.

»**Rui Zhao**, Kezhi Mao: *Cyberbullying Detection based on Semantic-Enhanced Marginalized Denosing Auto-Encoder*. IEEE Transactions on Affective Computing, 2017.

»**Rui Zhao**, Kezhi Mao: *Topic-Aware Convolutional Neural Network for Sentence Representation*. IEEE/ACM Transactions on Audio, Speech, and Language Processing, 2017.