# PEI CHEN

# https://brickee.github.io/

+1 979-739-4507  $\diamond$  chenpei.net@gmail.com

#### **EDUCATION**

### Ph.D. Candidate in Computer Science

2019.8 - 2023.12 (expected)

- · Research Areas: Natural Language Processing;
- · Research Interests: Large Language Model Pretraining and Prompting, Information Extraction;
- · Overall GPA: 4.0/4.0 till now.

Texas A&M University

MS in Finance 2016.9 – 2018.6

- · Thesis: Does News Sentiment Predict the Stock Market? An Example on Chinese Growth Market;
- · Received 2017 National Scholarship for Graduate Student;
- · Overall GPA: 3.9/5.0, ranking 1/178.

Southwestern University of Finance and Economics

## B.Engr. in Simulation Engineering

2010.9 - 2014.6

- · Thesis: Analyze and reconstruct the multi-resolution modeling technology of a simulation system;
- · Overall GPA 88.61/100, ranking 1/45.

National University of Defense Technology

#### **EXPERIENCE**

### AutoGluon Team, AWS AI

2023.5 - now

Applied Scientist (Intern)

Santa Clara, CA

Working on automatic prompting for large language models.

### Bedrock Team (Amazon Titan Model), AWS AI

2022.6 - 2023.1

Applied Scientist (Intern)

Santa Clara, CA

Proposed and pretrained a novel tabular language model and improved table understanding tasks.

Tencent AI Lab 2021.6 – 2021.8

NLP Researcher (Intern)

Seattle, WA

Proposed a comprehensive zero-shot benchmark for zero-shot knowledge base completion tasks.

### National Lab of Pattern Recognition, Chinese Academy of Sciences

2018.1-2019.8

Research Engineer

Beijing, China

Improved the event extraction and causality detection tasks from financial domain texts.

#### Innovation Lab of Global Exchange, State Street

2017.7- 2018.1

Data Analyst (Intern)

Hangzhou, China

Working on data cleaning, analysis, visualization and database construction for innovative financial applications.

#### **PUBLICATIONS**

**Pei Chen**, Soumajyoti Sarkar, Leonard Lausen, Balasubramaniam Srinivasan, Sheng Zha, Ruihong Huang, and George Karypis. "HYTREL: Hypergraph-enhanced Tabular Data Representation Learning.", 2023.

**Pei Chen**, Wenlin Yao, Hongming Zhang, Xiaoman Pan, Dian Yu, Dong Yu, and Jianshu Chen. "ZeroKBC: A Comprehensive Benchmark for Zero-Shot Knowledge Base Completion." ICDM-2022, KG workshop.

**Pei Chen**, Haotian Xu, Cheng Zhang, and Ruihong Huang. "Crossroads, Buildings and Neighborhoods: a Dataset for Fine-grained Location Recognition". NAACL-2022, long paper, acceptance rate: 21.96%.

**Pei Chen**, Haibo Ding, Jun Araki, and Ruihong Huang. "Explicitly Capturing Relations between Entity Mentions via Graph Neural Networks for Domain-specific Named Entity Recognition." ACL-2021, short paper, acceptance rate: 21.2%.

**Pei Chen**, Kang Liu, Yubo Chen, Taifeng Wang, and Jun Zhao. "Probing into the Root: A Dataset for Reason Extraction of Structural Events from Financial Documents." EACL-2021, short paper, acceptance rate: 24.7%.

**Pei Chen**, Hang Yang, Kang Liu, Ruihong Huang, Yubo Chen, Taifeng Wang, and Jun Zhao. "Reconstructing Event Regions for Event Extraction via Graph Attention Networks." AACL-2020, long paper, acceptance rate: 28.3%.

#### **SKILLS**

7 years of experience in Python, 4 years of experience in PyTorch, 2 years of experience in TensorFlow; 4 years of experience in C/C++ and 2 years of experience in SQL when in undergraduate;

Experienced in parallel pretraining and training across multiple GPUs and machines.