XI CHEN

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EDUCATION

University of Massachusetts Amherst **2019 - present**
PhD in Computer Science (GPA: 3.9/4)
Research Area: Social Network Analysis

Central South University **2014 - 2018**
Bachelor Degree of Engineering
Department: Computer Science (GPA 3.9/4)

EXPERIENCE

University of Massachusetts Amherst **2019.9 - present**
Analyzed on a global news graph with trillions of pairs predicted by a refined transformer model.
Quantified country effects on news similarity with greedy factor selection, event clustering, and regression.
Developed a large dataset of multilingual news article pairs with human-in-the-loop active learning framework.

Institute for Artificial Intelligence, Tsinghua University **2018.3 - 2018.9**
Automatically traced heterogeneous science funding and corresponding scholars with name disambiguation.

PROJECT

Large-scale Multilingual News Graph Mining

- extract cross-lingual name entities with Spacy, Polyglot, and Wikipedia concepts.
- recall, pre-rank, and rank similar news article pairs based on rules and active learning classifiers.
- Infer global news network for trillions of pairs with refined multilingual transformer and bi-directional index.
- built regression model to quantify country factors with greedy feature selection and clustering.
- Draw social science (e.g. politics) findings based on temporal and geographic analysis of global news network.

Personalized Opinion Graph Time Series Learning

- Modeled the dynamics of opinions and personalities with probabilistic graph time series.
- Devised an extended EM algorithm for learning the graph time series and get competitive performance.

PUBLICATION

International News Similarity during Covid-19 Pandemic
Xi Chen, Scott Hale, David Jurgens, Mattia Samory, Przemyslaw Grabowicz. To appeal, 2022.

Multilingual Document-level Similarity
Xi Chen, Ali Zeynali, Chico Camargo, Fabian Flock, Devin Gaffney, Przemyslaw Grabowicz, Scott Hale, David Jurgens, Mattia Samory. International Workshop on Semantic Evaluation at NAACL(**task paper, oral**), 2022.

Dynamic power management and adaptive packet size selection for IoT in e-Healthcare
Xi Chen, Ming Ma, Anfeng Liu. Computers & Electrical Engineering, 2018.

Cross Layer Design for Optimizing Transmission Reliability, Energy Efficiency, and Lifetime in Body Sensor Networks
Xi Chen, YiXuan Xu, Anfeng Liu. Sensors, 2017.

A Latency and Coverage Optimized Data Collection Scheme for Smart Cities Based on Vehicular Ad-hoc Networks
Yixuan Xu, **Xi Chen**, Anfeng Liu, Chunhua Hu. Sensors, 2017.

SKILL

PhD Courses: Machine Learning, Optimization, Natural Language Processing, Database, Algorithm, Probablistic Graph Model, Stochastic Calculus
Programming Language: Python, C/C++, R, Java, SQL, Linux, Matlab, Assembly Language
Framework: Experienced in Pytorch, Tensorflow, Spark

HONOR

Nomination for Chinese Exceptional Student (1/6500 ISchool undergrads and grads), 2018.
Ranked global Top50 of Autochess players (50/millions)