

Personal Information

Name	Renzhi Wu
Mobile number	+86 15652772649
E-mail	wurenzhi@foxmail.com
Nationality	China

Education

09.2016-01.2020	RWTH Aachen (Germany) & Tsinghua University (China) double-degree program Degree: Master of Engineering (research track)
09.2012-07.2016	Tsinghua University, School of Mechanical Engineering Degree: Bachelor of Engineering

Research Interests

Data management and machine learning.

Publications

[ZeroER: Entity Resolution using Zero Labeled Examples](#) (In submission to SIGMOD 2020)

Renzhi Wu, Sanya Chaba, Saurabh Sawlani, Xu Chu, Saravanan Thirumuruganathan

GOGGLES: Automatic Training Data Generation with Affinity Coding (SIGMOD 2020)

Nilaksh Das, Sanya Chaba, **Renzhi Wu**, Sakshi Gandhi, Duen Horng Chau, Xu Chu

[Dynamic Pattern Matching with Multiple Queries on Large Scale Data Streams](#) (Signal Processing, Special Issue on Statistical Signal Processing: Solutions and Advances for Data Science, 2019)

Sergey Sukhanov*, **Renzhi Wu***, Christian Debes, Abdelhak M. Zoubir (*equal contribution)

[Real-Time Pattern Matching with Dynamic Normalization](#) (Arxiv, 2019)

Renzhi Wu, Sergey Sukhanov, Christian Debes

A cross-scale simulation algorithm for dropwise condensation (Numerical Heat Transfer, under review)

Renzhi Wu, Zhifeng Hu, Xiaomin Wu

Research & project experiences

07.2019 - 08.2019	Visitor at Prof. Xu Chu's lab (Georgia Institute of Technology, Atlanta, USA) Worked on unsupervised entity resolution and automatic training data generation.
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03.2018 - 01.2020	Research assistant at Institute of Engineering Thermophysics (Tsinghua, Beijing). Development of high efficient simulation algorithms for cross-scale dropwise condensation.
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09.2017 - 02.2018	Full-time data scientist intern at AGT R&D (Darmstadt, Germany) 1. Proposed a data normalization mechanism along with a pattern matching approach for noisy time series data. 2. Contributed to the active learning framework of AGT.
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10.2017	Member of the 1st-place team at campus hackathon Darmstadt . We built a news analyzer(Lightning-Reads) which extracts important information from long news articles and present an intuitive and concise summary to help readers understand faster.
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01.2017 - 06.2017	Student Research Assistant at Cybernetics Lab IMA / ZLW & IfU (RWTH Aachen). 1. Investigated different behavior of different reinforcement learning algorithms. Some details of my early phase work can be found here . 2. Proposed a 3D trajectory-based time series representation and comparison method for classification and clustering of actions from accelerometer and gyroscope sensors. (Submitted patent application)
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01.2017 - 04.2017	Competition Expert at Kaggle . Top 3% in Porto Seguro's Safe Driver Prediction. Top 8% in Sberbank Russian Housing Market. Top 2% in House Prices: Advanced Regression Techniques. Top 1% in Titanic: Machine Learning from Disaster.
2015 - 2016	Studied 2-D shape classification using FT-based descriptors. We extended the classical Fourier descriptors, which only works in the simply connected 2-D domain, to multiply connected 2-D domain.

Courses

Math	Linear algebra; Calculus; Complex analysis; Numerical analysis
Statistics	Probability and statistics; Introduction to Bayesian statistics;
Computer Science	Algorithm and data structure; C++ programming language; Advanced software engineering; Machine learning;
Others	Data processing in thermal engineering; Introduction to optimization methods in energy systems;

Skills

Proficient in Python, familiar with Java, C++ and linux.

Languages

Chinese	Native
English	Proficient (TOEFL 110, GRE 337)
German	Basic (B1)

Scholarships

2017	Continental Scholarship at RWTH Aachen University
2016	National Scholarship at Tsinghua University