

QITONG WANG

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🏠 18-06-1993 · 🇨🇳 Chinese · ♂ Male · 🏳️ Single · 🏠 16 rue Emile Baudot 91120 Palaiseau

EDUCATION

Université de Paris <i>PhD. in Data Science, with Prof. Themis PALPANAS</i>	Paris, France Sep 2019 – Jun 2023 (Est.)
Fudan University <i>Master in Data Science, with Prof. Wei WANG and Peng WANG</i>	Shanghai, China Sep 2016 – Jun 2019
Stockholm University <i>Exchange Undergraduate in Computer Science</i>	Stockholm, Sweden Sep 2014 – Feb 2015
Fudan University <i>Bachelor in Computer Science, with Prof. Peng WANG</i>	Shanghai, China Sep 2012 – Jun 2016
No.2 Middle School of Yantai <i>High-School Student</i>	Yantai, China Sep 2009 – Jun 2012

RESEARCH EXPERIENCES

Thesis: Machine Learning in Data Series Management and Analytics diNo@LIPADE, Université de Paris	Sep 2019 – Present Paris, France
<ul style="list-style-type: none">• Exploiting deep neural models to facilitate data series indexing and query answering• Exploring applications in Neurosciences and Astrophysics domains of data-series techniques, especially enhanced by deep neural models• Implementing using <i>Python/PyTorch, C/C++</i>, various <i>CNN/RNN architectures</i>	
Interactive Chinese Phrase Mining Database Laboratory, Fudan University	Sep 2017 – Jun 2018 Shanghai, China
<ul style="list-style-type: none">• Formalized problem, surveyed and experimented on related techniques, i.e., Chinese Word Segmentation and Phrase Mining• Proposed an interactive Chinese phrase mining algorithm• Implemented using <i>Python/PyTorch, SkipGram</i> for embedding, <i>LSTM</i> for labeling, and <i>active learning</i> for user interaction	
Thesis: Mining of Moving Companion Patterns Database Laboratory, Fudan University	Sep 2016 – Aug 2017 Shanghai, China
<ul style="list-style-type: none">• Characterized real-world data, formalized problem and surveyed related techniques• Designed and implemented a distributed digest-based pruning algorithm, which pruned 99.5% candidates• Optimized and refactored the proposed algorithm in Java using a two-level pruning structure with hash and digests, resulting 90% promotion of running time• Implemented using <i>Java, Scala, Apache Spark, Locality Sensitive Hashing (LSH)</i>, <i>frequent pattern mining techniques</i>	
Development of TsFile, a Columnar File Format for Data Series National Big Data Software Laboratory, Tsinghua University	May 2016 – Aug 2016 Beijing, China
<ul style="list-style-type: none">• Designed and developed the writing module of TsFile, a time series management system• Studied literature of lossy compression encodings of data series, implemented and integrated into TsFile Run-Length Encoding (RLE), Delta Compression, Piecewise Linear Approximation (PLA), Swinging Door Algorithm (SDA), and Fast Fourier transform (FFT)	

- Analyzed codebase of Apache Impala, based on which implemented the distributed writing module of TsFile
- Implemented using *C++, Java, Apache Thrift, Apache Impala*

Thesis: Mining of Spatial Data

Database Laboratory, Fudan University

Nov 2015 – Apr 2016

Shanghai, China

- Designed and implemented a distributed map-matching algorithm using grid index and hidden markov model
- Implemented using *Java, Apache Hadoop, Hidden Markov Model (HMM)*

INTERNSHIPS

Research Assistant

With Prof. Reynold C.K. CHENG, The University of Hong Kong

Dec 2018 – Feb 2019

Hong Kong, China

- Facilitated multimedia database queries with embedding techniques
- Implemented using *C++, Java, Python, Osmosis library of OpenStreetMap*

Research Assistant

With Prof. Jianmin WANG and Chen WANG, Tsinghua University

May 2016 – Aug 2016

Beijing, China

- Developed TsFile, a Columnar File Format for Data Series, deployed in Apache IoTDB
- Implemented using *C++, Java, Apache Thrift, Apache Impala*

PROFESSIONAL EXPERIENCES

Teaching Assistant

School of Computer Science, Fudan University

Shanghai, China

Probability and Statistics

Sep 2017 – Jan 2018

Discrete Mathematics

Sep 2017 – Jan 2018

Introduction to Databases

Mar 2018 – Jul 2018

New Query Approach in Big Data Era

Jul 2018

- Corrected homeworks, delivered recitations, arranged/designed/graded examinations

SOCIAL SERVICES

Volunteer Caregiver

Sunshine Home

Feb 2015 – Dec 2018

Shanghai, China

- Entertained intellectual-disabled persons monthly

Volunteer Teacher

AIIESEC Kilimanjaro

Jun 2013 – Aug 2013

Moshi, Tanzania

- Taught English and Mathematics at Mrupanga Primary School
- Raised funding for Tuleeni Orphans Home

PUBLICATIONS

- **Qitong Wang**, Peng Wang, Yuliang Zhao and Wei Wang. *An Efficient Approach to Mining Moving Companion Patterns*. The 35th Chinese National Database Conference (NDBC), Dalian, China, 2018
- Yuliang Zhao, **Qitong Wang**, Peng Wang, Wei Wang, and Zhiguo Yan. *A Distributed Approach of Accompany Vehicle Discovery*. The 6th International Conference on Applications and Techniques in Cyber Security and Intelligence (ATCI), Shanghai, China, 2018
- Zhongsheng Li, Qiuhong Li, Wei Wang, **Qitong Wang**, Fengbin Qi, Yimin Liu, and Peng Wang. *HDUMP: A Data Recovery Tool for Hadoop*. The 23th International Conference on Database Systems for Advanced Applications (DASFAA), Gold Coast, Australia, 2018

AWARDS

- Outstanding Graduate of Shanghai City (*Top 5%*) 2019
- Tung OOCL Award at Fudan University (*Top 2%*) 2017
- EMC Award at Fudan University (*Top 5%*) 2016/13
- Outstanding Graduate of Fudan University (*Top 10%*) 2016
- Outstanding Student Scholarship of Fudan University (*Top 30%*) 2019/18/16/14/13

SKILLS

- Programming Skills: Python, C/C++, Java, Scala, SQL
- Open-Source Frameworks: PyTorch, Apache Hadoop, Apache Spark, and etc.
- Language Skills: English (CET-4/6, TOEFL-102, GRE-326), Chinese (Native)