

XIANGLIANG ZHANG, Ph.D.

CEMSE Division, King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Saudi Arabia / +966 128080313 / xiangliang.zhang@kaust.edu.sa / <http://mine.kaust.edu.sa>

WORK EXPERIENCE

2011 – KAUST Assistant Professor	2010 – 2011 KAUST Research Scientist	2010 NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY European ERCIM Research Fellow
2009 – 2010 INSERM & UNIVERSITY PARIS-SUD 11 Graduate Student Research Assistant	2006 – 2009 INRIA & UNIVERSITY PARIS-SUD 11 Graduate Student Research Assistant	2006 UNIVERSITY OF TRENTO Research Intern

RESEARCH INTERESTS

Data Mining and Big Data Analysis, Machine Learning and its applications.

EDUCATION

2010 INRIA AND UNIVERSITY PARIS-SUD 11, FRANCE Computer Science Ph.D. (with honors)	2006 XI'AN JIAOTONG UNIVERSITY, CHINA Electronic Engineering M.S.	2003 XI'AN JIAOTONG UNIVERSITY, CHINA Information Engineering B.S.
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SELECTED AWARDS

2010 CHINESE GOVERNMENT AWARD FOR OUTSTANDING SELF-FINANCED STUDENTS ABROAD	2009 ERCIM “ALAIN BENSOUSSAN” FELLOWSHIP	2006 ECCAI TRAVEL AWARD
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SUPERVISING RESEARCH

2016 - KE SUN Postdoctoral research fellow	2016 - AN LIU Postdoctoral research fellow	2015 - 2016 CHENGBIN PENG Research Associate
2014 - 2016 MOUSTAPHA CISSE Postdoctoral research fellow	2013 - 2015 QING XIE Postdoctoral research fellow	2013 - 2014 ZHIXU LI Postdoctoral research fellow
2012 - 2014 FAISAL KAMIRAN Postdoctoral research fellow	2012 - 2014 HAI HUANG Postdoctoral research fellow	2012 HENGJIE SONG Postdoctoral research fellow
2017 - JIE-WEI CHEN Ph.D. candidate	2016 - LU YU Ph.D. candidate	2016 - SHICHAO PEI Ph.D. candidate
2016 - GUOLEI SUN Ph.D. candidate	2016 - UCHENNA AKUJUOBI Ph.D. candidate	2013 - BASMAH ALTAF Ph.D. candidate
2012 - IBRAHIM ALABDULMOHSIN Ph.D. candidate	2011 - BASMA AL-HARBI Ph.D. candidate	2011 - 2016 ABDULHAKIM QAHTAN Ph.D. student
2014 - 2016 SU WANG M.S. student	2015 - 2016 UCHENNA AKUJUOBI M.S. student	2012 - 2013 BASMAH ALTAF M.S. student

2011
SHUAI ZHENG
M.S. student

2011
TAK MAN DESMOND LEE
M.S., co-supervised

VISITING

July - August 2016
UNIVERSITY OF VICTORIA
Visiting Professor

July 2016
UNIVERSITY OF ROCHESTER
Visiting Professor

March 2014, October 2012
UNIVERSITE PARIS-SUD
Visiting Professor

January 2013, August 2011
TEXAS A&M UNIVERSITY
Visiting Professor

July - August 2012
CONCORDIA UNIVERSITY
Visiting Professor

June 2012, November 2011
MICROSOFT RESEARCH ASIA
Visiting Professor

June - August 2011
IBM T. J. WATSON RESEARCH CENTER
Visiting Scientist

July - August 2010
UNIVERSITY OF LUXEMBOURG
Visiting Researcher

January 2008
MASARYK UNIVERSITY
Visiting Research Student

TEACHING

Spring 2016, Spring 2015, Spring 2014,
Spring 2013, Spring 2012, Spring 2011
MACHINE LEARNING

Fall 2016, Fall 2015, Fall 2013, Fall 2012, Fall
2011, Fall 2010
**COMPUTATIONAL METHODS IN DATA
MINING**

RESEARCH PROJECTS

2011 - 2017
SOLE PRINCIPAL INVESTIGATOR (PI)
Algorithms and applications of
machine intelligence and knowledge
engineering
KAUST BASELINE
2.1M USD

2012 - 2013
PI
(with Dr. Hani Jamjoom (PI) at IBM
Watson)
LIQUIDx - An Elasticity Framework for
High Performance Computing Clouds
KAUST-IBM JOINT PROJECT
657K USD

2012 - 2013
PI
(with Prof. Suojin Wang (PI) at
TA&MU)
Some Highly Collaborative Research
Problems in Statistical Machine
Learning and Uncertainty
Quantification
INNOVATION AWARD
40K USD

2016 - 2019
PI
Extreme Classification of Complex Data
with Applications to Multi-media and
Recognition of Plastic Debris Floating
in Seawater
KAUST Competitive Research Grants
1,291,198 USD

PROFESSIONAL ACTIVITIES

Guest Editor
IEEE NETWORK
**MATHEMATICS IN COMPUTER
SCIENCE**

Technical Program Committee Member
IJCAI 2017 (SPC) AAAI 2017 WSDM 2017 SDM 2017
AAAI 2016 KDD 2016 ICDM 2016 APWEB 2016 (DEMO CHAIR) ICMLA 2016
CLOUDNET 2016 WAIM 2016
KDD 2015 ICDM 2015 WSDM 2015 SAC 2015 WAIM 2015

**KDD 2014 ICDE 2014 ICDM 2014 SAC 2014 WAIM 2014 CLOUDNET 2014
ICDM 2013 WISE 2013 WAIM 2013 CSWS 2013 ADMA 2013
MACIS 2013 (TRACK CHAIR)
CIKM 2012 WISE 2012 WAIM 2012 EDB 2012 ADMA 2012
SSDBM 2011 ICMLA 2011 KAUST-WEP 2011 ADMA 2011**

Membership

**PASCAL ECCAI IEEE AAAI
ACM**

UNIVERSITY SERVICE

Faculty Search Committee
2013, 2014
STATISTICS
KAUST

Graduate Student Admission Committee
2012, 2013
COMPUTER SCIENCE PROGRAM
KAUST

Thesis Committees
2011-
11 PH.D. OF COMPUTER SCIENCE
18 MASTER OF COMPUTER SCIENCE
KAUST
1 PH.D. OF COMPUTER SCIENCE
(JURY MEMBER)
UNIVERSITE PARIS-SUD

SELECTED RECENT 15 PUBLICATIONS

1. Abdulhakim A Qahtan, Suojin Wang, [Xiangliang Zhang](#), "KDE-Track: An Efficient Dynamic Density Estimator for Data Streams". Accepted by IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2016
2. Basma Alharbi, [Xiangliang Zhang](#). "Learning from your network of friends: a trajectory representation learning model based on online social ties". Accepted by the 16th IEEE International Conference on Data Mining (**ICDM 2016**), Barcelona, December 12-15, 2016 (acceptance rate=19.6%)
3. Binbin Gu, Zhixu Li, [Xiangliang Zhang](#), An Liu, Guanfeng Liu, Kai Zheng, Lei Zhao, Xiaofang Zhou. "The Interaction between Schema Matching and Record Matching in Data Integration". Accepted by IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2016
4. Qing Xie, [Xiangliang Zhang](#), Zhixu Li, Xiaofang Zhou, "Optimizing Cost of Continuous Overlapping Queries over Data Streams by Filter Adaption". Accepted by IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2016.
5. Basma Alharbi, Abdulhakim A Qahtan, [Xiangliang Zhang](#), "Minimizing User Involvement for Learning Human Mobility Patterns from Location Traces". Accepted by the 30th AAAI Conference on Artificial Intelligence (**AAAI 2016**), Phoenix, Arizona, February 12-17, 2016 (regular paper, acceptance rate=549/2132=25.7%) .
6. Ibrahim Alabdulmohsin, Moustapha Cisse, Xin Gao, [Xiangliang Zhang](#), "Large Margin Classification with Indefinite Similarities". Accepted by **Machine Learning Journal**, 2016.
7. Abdulhakim A Qahtan, Basma Harbi, Suojin Wang, [Xiangliang Zhang](#), "A PCA-Based Change Detection Framework for Multidimensional Data Streams". 21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD 2015**), pp. 935 - 944, Sydney, Australia, August 10-13, 2015 (acceptance rate=159/819=19.4%).
8. Zhixu Li, Lu Qin, Hong Cheng, [Xiangliang Zhang](#), Xiaofang Zhou, "TRIP: An Interactive Retrieving-Inferring Data Imputation Approach". IEEE Transactions on Knowledge and Data Engineering (**TKDE**), vol. 27, no. 9, pp.2550 - 2563, 2015.
9. Chengbin Peng, Zhihua Zhang, Ka-Chun Wong, [Xiangliang Zhang](#), David Keyes, "A Scalable Community Detection Algorithm for Large Graphs Using Stochastic Block Models". 24th International Joint Conference on Artificial Intelligence (**IJCAI 2015**), pp. 2090 - 2096, Buenos Aires, Argentina, July 25-31, 2015 (regular paper, acceptance rate=575/1996=28.8%).
10. Ibrahim M Alabdulmohsin, Xin Gao, [Xiangliang Zhang](#), "Efficient Active Learning of Halfspaces via Query Synthesis". Twenty-Ninth AAAI Conference on Artificial Intelligence (**AAAI 2015**), pp. 935 – 944, Austin, Texas, January 25–29, 2015 (regular paper, acceptance rate=531/1991=26.7%).
11. Wei Wang, Xing Wang, Dawei Feng, Jiqiang Liu, Zhan Han, [Xiangliang Zhang](#), "Exploring Permission-induced Risk in Android Applications for Malicious Application Detection". IEEE Transactions on Information Forensics and Security (**TIFS**), vol. 9, no. 11, pp. 1869-1882, 2014.
12. Ibrahim M Alabdulmohsin, Xin Gao, [Xiangliang Zhang](#), "Adding Robustness to Support Vector Machines Against Adversarial Reverse Engineering". Accepted by the 23rd ACM International Conference on Information and Knowledge Management (**CIKM 2014**), pp. 231-240, Shanghai, China, November 3-7, 2014 (full paper, acceptance rate=95/457=20.8%).
13. Qing Xie, Chaoyi Pang, Xiaofang Zhou, [Xiangliang Zhang](#), Ke Deng, "Maximum Error-bounded Piecewise Linear Representation for Online Stream Approximation". The VLDB Journal (**VLDBJ**), vol. 23, no. 6, pp. 915-937, 2014.

14. Dan Williams, Shuai Zheng, Xiangliang Zhang, Hani Jamjoom, "TideWatch: Fingerprinting the Cyclicity of Big Data Workloads". Accepted by the 33rd Annual IEEE International Conference on Computer Communications (**INFOCOM 2014**), Toronto, Canada, April 27 - May 2, 2014 (regular paper, acceptance rate=320/1645=19.4%).
15. Xiangliang Zhang, Cyril Furtlehner, Cécile Germain, Michèle Sebag, "Data Stream Clustering with Affinity Propagation". IEEE Transactions on Knowledge and Data Engineering (**TKDE**), vol. 26, no. 7, pp. 1644-1656, 2014 .