

# Yixue Zhao

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## Education

University of Southern California (USC)	USA
<b>Doctor of Philosophy</b> in Computer Science	2014 – Present
Advisor: Nenad Medvidović	
Cumulative GPA - 3.91/4.0	
University of Oxford & York University	UK
Engineering Summer School	Summer, 2013
Harbin Institute of Technology (HIT)	China
<b>Bachelor of Engineering</b> in Software Engineering	2010 – 2014
Advisor: Zhongjie Wang	
Cumulative GPA - 88.93/100 (Rank 1/136)	

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## Research Experience

SoftArch Lab	USC, USA
Reducing User-Perceived Latency in Mobile Apps via Data Prefetching (Dissertation)	Current
Design and Develop Infrastructure Support to Facilitate Open Science	Current
Reduced Inter-Component Security Vulnerabilities in Android Apps	2016 – 2017
Studied Architecture Change and Decay in Open-Source Systems	2015 – 2017
CREST Centre	UCL, UK
Designed and Developed a Framework for Evaluating UI Test Reuse	Summer, 2019
Intelligent Computing Lab	HIT, China
Designed and Developed Methods for Personal Data Integration in Heterogeneous Services	2013 – 2014

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## Awards & Honors

<b>Microsoft Research Dissertation Grant (11 recipients in North America)</b>	MSR, 2019 – 2020
UIUC Rising Star in EECS	UIUC, 2019
WiSE Merit Award (3 recipients in Viterbi School of Engineering)	USC, 2019
Best Research Assistant Award (3 recipients in CS Department)	USC, 2018
Jenny Wang Excellence in Teaching Award (1 recipient in CS Department)	USC, 2018
1st Place in MOBILESoft Student Research Competition	MOBILESoft, 2017
University Graduate Fellowship	USC, 2014
University Scholarships, <i>consecutive</i>	HIT, 2010 – 2014
Outstanding Student Awards, <i>consecutive</i>	HIT, 2010 – 2014
<b>China National Scholarship (0.2% in China)</b>	Ministry of Education of China, 2013
2nd Place of The Oxford Study Programme Scholarship	Kingdom Education, 2013
Honorable Mention of 2013 Interdisciplinary Contest In Modeling	COMAP, 2013

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## Publications

### Full Conference Papers

#### F6: FrUITeR – A Framework for Evaluating UI Test Reuse (to appear)

Yixue Zhao, Justin Chen, Adriana Sejfia, Marcelo Schmitt Laser, Jie Zhang, Federica Sarro, Mark Harman, Nenad Medvidovic

Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2020), acceptance rate: 28% = 101/360

#### F5: Empirically Assessing Opportunities for Prefetching and Caching in Mobile Apps

Yixue Zhao, Paul Wat, Marcelo Schmitt Laser, Nenad Medvidovic

International Conference on Automated Software Engineering (ASE 2018), acceptance rate: 19.9% = 69/346

- F4: Leveraging Program Analysis to Reduce User-Perceived Latency in Mobile Applications**  
Yixue Zhao, Marcelo Schmitt Laser, Yingjun Lyu, Nenad Medvidovic  
 International Conference on Software Engineering (ICSE 2018), acceptance rate: 20.9% = 105/502
- F3: A SEALANT for Inter-App Security Holes in Android**  
 Youn Kyu Lee, Jae young Bang, Gholamreza Safi, Arman Shahbazian, Yixue Zhao, Nenad Medvidovic  
 International Conference on Software Engineering (ICSE 2017), acceptance rate: 17.1% = 68/398
- F2: Code Anomalies Flock Together: Exploring Code Anomaly Agglomerations for Locating Design Problems**  
 Willian Oizumi, Alessandro Garcia, Leonardo da Silva Sousa, Bruno Cafeo, Yixue Zhao  
 International Conference on Software Engineering (ICSE 2016), acceptance rate: 19.1% = 101/530
- F1: A Linked Data based Personal Service Data Collection and Semantics Unification Method**  
Yixue Zhao, Zhongjie Wang, Liping Zou, Jiaqiu Wang, Youqiang Hao  
 International Conference on Service Science (ICSS 2014)

#### Short Papers

- S5: Mobile-App Analysis and Instrumentation Techniques Reimagined with DECREE**  
Yixue Zhao, Nenad Medvidovic  
 International Conference on Software Engineering (ICSE 2019), ROSE Festival (Position Paper)
- S4: A Microservice Architecture for Online Mobile App Optimization**  
Yixue Zhao, Nenad Medvidovic  
 International Conference on Mobile Software Engineering and Systems (MOBILESoft 2019), Visions Track
- S3: Mobile-App Analysis and Instrumentation Techniques Reimagined with DECREE**  
Yixue Zhao  
 International Conference on Software Engineering (ICSE 2019), Doctoral Symposium, acceptance rate: 29% = 9 (oral presentation)/31
- S2: MOBILESoft: G: Reducing Latency in Mobile Apps via Program Analysis**  
Yixue Zhao  
 ACM Student Research Competition Grand Final 2018
- S1: Toward Client-Centric Approaches for Latency Minimization in Mobile Applications**  
Yixue Zhao  
 International Conference on Mobile Software Engineering and Systems (MOBILESoft 2017), Student Research Competition

#### Book Chapters

- B1: Mining the Social Web, 2<sup>nd</sup> Edition. Matthew A. Russell (Chinese Translation)**  
 Tonghua Su, Tong Wei, Yixue Zhao, Shuoxing Wang, Zhiyue Liu  
 China Machine Press, 2015

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#### Academic Services

Organizing Committee: MOBILESoft 2020, ASE 2019, MOBILESoft 2019  
 Student Volunteer: ICSE 2017

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#### Mentoring and Teaching

Mentored undergraduates Justin Chen, Siwei Yin, Paul Wat, Marcelo Laser	2017 – Present
Outcome: 3 top-tier full research papers, 1 full research paper under review	
Mentored high school student Diana Balderas in Young Researchers Program	Summer, 2017
Outcome: the resulting project has won the 2017 Congressional App Challenge	
TA for CSCI-310: Software Engineering, Instructor: Nenad Medvidović	USC, Fall 2016, 2017
TA for CSCI-585: Database Systems, Instructor: Saty Raghavachary	USC, Spring 2016

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#### Invited Talks

Reducing User-Perceived Latency in Mobile Apps via Data Prefetching	UIUC, 2019
Networking at Research Conferences	USC, 2019
Reducing User-Perceived Latency in Mobile Apps via Data Prefetching	PKU, 2018
Program Analysis for Latency Optimization in Mobile Apps (Guest Lecture)	USC, 2018
Program Analysis for Latency Optimization in Mobile Apps (Networked Systems Lab)	USC, 2017

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## Professional Activities

Women in Computing Club Organizing Committee	USC, 2019 – Present
Microsoft Research PhD Summit, Participant	MSR, 2019
UIUC EECS Rising Stars Workshop, Participant	UIUC, 2019
<i>Byte of Life</i> Seminar on Work-Life Balance, Panelist	USC, 2019
Viterbi Teaching Assistant Training, Panelist	USC, 2018
Quantitative Finance Women's PhD Mentorship Program (8 recipients in USA)	Morgan Stanley, 2017
CRA-WP Grad Cohort, Participant	CRA-WP, 2017
Fake Fancy - Academic and Industry Panel, Panelist	USC, 2017
Grace Hopper Celebration of Women in Computing, Participant	AnitaB.org, 2015

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## Press Coverage

Rising Star Honored for Early Achievements and Promise	USC, 2019
Dissertation grant recipients embarking on diverse paths to scientific and societal impact	MSR, 2019
Interviewed by American Language Institute to Represent International Students	USC, 2018