

# Shichao YUE

## PERSONAL INFORMATION

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TITLE: Technology Lead for Research and Development  
COMPANY: Emerald Innovations, Inc.  
EMAIL: [email@scyue.me](mailto:email@scyue.me)  
ADDRESS: One Broadway St, 14th Floor, Cambridge, MA 02142.  
HOMEPAGE: <http://scyue.me>

## EDUCATION

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2018 - 2021 Ph.D. in *Computer Science*  
Advisor: **Prof. Dina Katabi**  
Massachusetts Institute of Technology, U.S.A

2016 - 2018 S.M. in *Computer Science*  
Advisor: **Prof. Dina Katabi**  
Massachusetts Institute of Technology, U.S.A

2012 - 2016 B.E. in *Computer Science and Technology*  
Tsinghua University, China  
GPA: **93.3/100** (Rank: **1<sup>st</sup>/116**)

## PROFESSIONAL EXPERIENCE

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JUN 2021 - CURRENT	<b>Tech Lead of D&amp;R @ Emerald Innovations, Inc.</b> Design, develop, optimize, implement, test, and deploy software and hardware systems, and analyze data.
MAY 2020 - AUG 2020	<b>Machine Learning Intern @ Facebook Inc.</b> Team: <b>GamingML</b> Proposed and implemented an automatic game highlight detection system.
MAY 2019 - AUG 2019	<b>Research Intern @ Emerald Innovations Inc.</b> Developed a distributed breathing extraction system.
NOV 2015 - JUN 2016	<b>Research Intern @ Tsinghua University</b> Advisor: <b>Prof. Yuanchun Shi</b> Assisting <i>English-as-a-Second-Language</i> writers by giving statistical suggestions
JUL 2015 - SEP 2015	<b>Research Intern @ UC Berkeley</b> Advisor: <b>Prof. Brian A. Barsky</b> Improving the efficiency of Eyeglasses-free Display.
APR 2015 - JUL 2015	<b>Research Intern @ Chinese University of Hong Kong</b> Advisor: <b>Prof. Minghua Chen</b> Designed a simple yet effective online load-balancing algorithm

## PUBLICATIONS

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1. **CornerRadar: RF-Based Indoor Localization Around Corners.**  
**Shichao Yue\***, Hao He\*, Peng Cao\*, Kaiwen Zha, Masayuki Koizumi, Dina Katabi.  
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp) 2022.
2. **BodyCompass: Monitoring Sleep Posture with Wireless Signals.**  
**Shichao Yue**, Yuzhe Yang, Hao Wang, Hariharan Rahul and Dina Katabi.  
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp) 2020.
3. **Liquid Testing with Your Smartphone.**  
**Shichao Yue** and Dina Katabi.  
ACM International Conference on Mobile Systems, Applications, and Services (MobiSys) 2019.  
**SIGMOBILE Research Highlight**  
**CACM Research Highlight**
4. **Extracting Multi-Person Respiration from Entangled RF Signals.**  
**Shichao Yue**, Hao He, Hao Wang, Hariharan Rahul and Dina Katabi.  
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp) 2018.
5. **Zero-Effort In-Home Sleep and Insomnia Monitoring using Radio Signals**  
Chen-Yu Hsu, Aayush Ahuja, **Shichao Yue**, Rumen Hristov, Zachary Kabelac, and Dina Katabi.  
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (Ubicomp) 2017.
6. **Learning sleep stages from radio signals: A conditional adversarial architecture.**  
Mingmin Zhao, **Shichao Yue**, Dina Katabi, Tommi S. Jaakkola, and Matt T. Bianchi.  
International Conference on Machine Learning (ICML) 2017.
7. **CEPT: Collaborative Editing Tool for Non-Native Authors.**  
Yeshuang Zhu, **Shichao Yue**, Chun Yu, and Yuanchun Shi.  
ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW) 2017.
8. **Assessing Pain and Sleep Patterns in Endometriosis: A Pilot Study Using Passive Radio Sensors**  
Loring, Z Kabelac, U Munir, **S Yue**, HY Ephraim, SN Morris, KB Isaacson, LG Griffith, D Katabi  
Journal of Minimally Invasive Gynecology 2019.
9. **Novel Technology to Capture Objective Data from Patients' Recovery from Laparoscopic Endometriosis Surgery**  
M Loring, Z Kabelac, U Munir, **S Yue**, H Y Ephraim, H Rahul, K B Isaacson, L G Griffith, D Katabi  
Journal of Minimally Invasive Gynecology 2019.

## AWARDS

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AUG 2020	<b>CACM Research Highlight</b> <i>Liquid Testing with Your Smartphone</i> receives CACM Research Highlight of 2020
OCT 2019	<b>SIGMOBILE Research Highlight</b> <i>Liquid Testing with Your Smartphone</i> receives SIGMOBILE Research Highlight of 2019
JUN 2016	<b>Tsinghua Outstanding Graduate Award</b>
JUN 2016	<b>Beijing Outstanding Graduate Award</b>
JUN 2015	<b>Google Excellence Scholarship</b>
DEC 2014	<b>Zhong Shimo Scholarship</b> The highest award for undergraduates in CS Dept.
MAY 2014	<b>Tsinghua Sparks Program Membership</b> Among top 50/3000 students for achievements in scientific and technological innovations
DEC 2013	<b>December 9<sup>th</sup> Scholarship</b> The second highest award for undergraduates in Tsinghua