

Renju Liu

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Google Scholar: <https://scholar.google.com/citations?user=8Eq00zYAAAAJ&hl=en>

EDUCATION	<i>Ph.D. Candidate</i> , Computer Science UCLA, Los Angeles, CA 90024 GPA: 3.84/4.0	Sept 2016 - current
	<i>B.S.</i> , Computer Science Purdue University, West Lafayette, IN 47907 GPA 3.87/4.0	Aug 2010 - May 2014
	<i>B.S.E.</i> , Electrical Engineering Purdue University, West Lafayette, IN 47907 GPA 3.87/4.0, with Distinction	Aug 2010 - May 2014
PUBLICATIONS	“VirtSense: Virtualize Sensing through ARM TrustZone on Internet-of-Things” Renju Liu and Mani Srivastava, in Proc. of the 3rd Workshop on System Software for Trusted Execution, 2018	
	“PROTC: Protecting Drone’s Peripherals through ARM TrustZone” Renju Liu and Mani Srivastava, in Proc. of the 3rd Workshop on Micro Aerial Vehicle Networks, Systems, and Applications (DroNet), 2017	
	“MyoBuddy: Detecting Barbell Weight Using Electromyogram Sensors” Renju Liu , Bo-Jhang Ho, Hsiao-Yun Tseng, and Mani Srivastava, in Proc. of the 1st Workshop on Digital Biomarkers 2017	
	“Understanding the Characteristics of Android Wear OS.” Renju Liu and Felix Xiaozhu Lin, in <i>Proc. ACM Conf. Mobile Systems, Applications and Services(MobiSys)</i> , 2016. Acceptance rate: 15.7%	
	“Anatomizing System Activities on Interactive Wearable Devices” Renju Liu , Lintong Jiang, Ningzhe Jiang and Felix Xiaozhu Lin, in <i>Proc. ACM Asia-Pacific Workshop on Systems (APSys)</i> , 2015. (Best Paper)	
EXPERIENCE	<i>Graduate Research Assistant for Prof. Mani Srivastava</i> UCLA, CS Department, Los Angeles, CA Explore and build a secure IoT framework <ul style="list-style-type: none">• Build safe and efficient Internet-of-Things (IoT) systems• Provide a sensors and actuators virtualization system to achieve a better energy and time efficiency, and high security for IoT devices• Utilize ARM TrustZone technology to construct the trusted computing base for the authentication, execution, and memory compartmentalization of IoT system	Sept 2016 - current

Software Engineering Intern in Content Modeling June 2018 - Sept 2018
Pinterest Inc, San Francisco, CA

- Write Spark jobs to process large datasets
- Provide better understanding of contents of users' Pinterest Pins

Software Engineering Intern in Detection Infra June 2017 - Sept 2017
Facebook Inc, Menlo Park, CA

- Work for detection infrastructure to validate security rules
- Provide tools to detect malicious behaviors inside Facebook
- Build internal tools in PHP, JavaScript and React to manage security rules

Graduate Research Assistant for Prof. Felix Lin Aug 2014 - May 2016
Purdue University, ECE Department, West Lafayette, IN

Explore and build low latency, low energy consumption interactive wearable OS

- Customized profiling tools and submitted Linux kernel patches for Android Wear that is not yet fully open source
- Investigated the causes of high-energy consumption and high-latency of wearable OS using the tools and kernel patches created
- Developed low-latency and low-energy consumption wearable OS based on new learnings using heterogeneous board (Panda board) through leveraging Linux kernel

EDITORIAL DUTIES

Journal reviewer, **Computers & Security**, Dec 2017,

<https://ees.elsevier.com/cose/default.asp>

Journal reviewer, **Computers & Security**, Mar 2018,

<https://ees.elsevier.com/cose/default.asp>

Journal reviewer, **Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)**, Feb 2018, <https://imwut.acm.org/>

Journal reviewer, **Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)**, May 2018, <https://imwut.acm.org/>

Journal reviewer, **Ad Hoc & Sensor Wireless Networks**, July 2018,

<http://journals.sfu.ca/ahswm/>

Journal reviewer, **Computers & Security**, July 2018,

<https://ees.elsevier.com/cose/default.asp>

Paper reviewer, **The 24th International Conference on Parallel and Distributed Systems**, Aug 2018, <https://icpads.sg/program.html>

Journal reviewer, **Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)**, Dec 2018, <https://imwut.acm.org/>

UNDERGRAD PUBLICATION

“Laser-Assisted Fabrication of Electrochemical Cells on Wax Paper”

Girish Chitnis, Tianlin Tan, **Renju Liu**, Babak Ziaie

in *12th International Workshop on Micro and Nanotechnology for Power Generation and Energy Conversion Applications (PowerMEMS) 2012*

TEACHING	<i>Graduate Teaching Assistant for undergraduate C Programming Class</i> Spring 2016 Purdue University, ECE Department <ul style="list-style-type: none"> • Wrote the solutions to class's projects and homework assignments • Held the office hours to help students understand the concepts of C and the assignments
	<i>Undergrad Teaching Assistant for Java and Physics Class</i> Spring 2013, Fall 2012 Purdue University, CS Department & Physics Department <ul style="list-style-type: none"> • Answered questions for students during recitations • Tutored students on homework, exams, and projects
COMPUTER SKILLS	<i>Languages & Software:</i> C, C++, Java, Bash, Python, Objective-C, Swift, MATLAB, ANTLR, YACC, Scheme <i>System Related Classes:</i> Operating System, Compilers, Database System, Parallel Programming Machine, Artificial Intelligence, Computer Networks, Information Security
HONORS AND SCHOLARSHIPS	Ross Fellowship, Purdue University Eli Shay ROTC Scholarship, Purdue University Dean's list & Semester Honors, Purdue University Distinct Undergraduate, Purdue University