# **CHAO XU**

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## **EDUCATION**

Virginia TechVirginia, United StatesPhD. in Computer ScienceAug. 2018 – Present

Advisor: Prof. Gang Wang

**Fudan University**Research Assistant
Shanghai, China
June 2017 – Apr. 2018

• Advisor: Prof. Yang Chen; Co-advisor: Prof. Xin Wang

• Full-time in Mobile Systems and Networking Group

## **Bachelor with Honor in School of Information Science and Technology**

Sep. 2013 – June 2017

• GPA: 3.61/4.00

- Selected awards: Third Prize for Outstanding Students (2014, 2015), Sunny Healthy Stars (top 1% of 2000 Students, awarded to those with outstanding performance in University Physical Test)
- Selected to Elite Electrical Engineer Program (top 5% of 500 students, on the basis of outstanding research performance)

## **National University of Singapore**

Singapore Jan. 2016 – May 2016

**Exchange Student** 

- Earned 12 course credits, GPA: 4.0/5.0
- Joined and researched in Professor Rui Zhang's Communications Research Group

#### **University of Hertfordshire**

United Kingdom Aug. 2015

Summer School Student

• Completed Practical Skills Training Course for Fudan University Elite Engineering Students

# **PUBLICATIONS**

- 1. Q. Gong, Y. Chen, X. Yu, C. Xu, Z. Guo, Y. Xiao, F. Ben Abdesslem, X. Wang, P. Hui "Exploring the Power of Social Hub Services", 2018, *Word Wide Web Journal*
- 2. Q. Gong, X. Yu, C. Xu, Z. Guo, Y. Chen, X. Wang "Leveraging the Potential of Social Hub Services", December 12, 2017, *CoNEXT'17 Student Workshop*

## RESEARCH EXPERIENCE

## **Fudan University (Department of Computer Science)**

Shanghai, China

Research Assistant to Professor Yang Chen

Nov. 2016 – Present

#### **Understanding the User Behavior in Online Social Networks**

- Using Matrix Factorization and Clustering algorithms to classify users and shops on Dianping website and to study their distribution and characteristics, aiming to study urban planning and recommendation systems
- Leveraging potential of social hub services (SHS). Based on cross-links, an important function of SHS, aggregating users' profiles on several websites for further analysis and investigation into privacy issues. Cross-links also provide outstanding method for influential prediction, study of multi-layer social networks and further understanding of comprehensive influence across assorted online social networks

#### **Fudan University (Department of Communications)**

Shanghai, China

Research Assistant to Professor Yu Zhu

Sep. 2015 - Nov. 2016

# **Hybrid Beamforming Design for Lens MIMO**

• Graduation thesis; Studied new lens-based MIMO system and used hybrid beamforming architecture to achieve capacity-optimal performance with low complexity and cost

# Non-Linear Energy Harvesting Model Characterization

• Employed mathematical and physical methods to study general relationship between efficiency and losses in microwave energy conversion circuits and attempted to build representative model for power characterization

#### **National University of Singapore (Department of ECE)**

Singapore

Research Assistant to Professor Rui Zhang, Associate Head

Jan. 2016 – May 2016

#### **Waveform Design**

• Aimed to find trade-off between efficiency and subcarriers in energy harvesting system to optimize waveform design

• From specific perspective in frequency domain, largely simplified the study model for waveform design issues in simultaneous wireless information and power transfer(SWIPT) system

## Fudan University (Department of Electrical Engineering)

Shanghai, China

Denghui Academic Program

Sep. 2015 – Jan. 2017

#### Portable Oscilloscope Development (Fudan's Undergraduate Research Opportunities Program)

- Designed a portable device functioning as oscilloscope and voltage source based on development of FPGA
- Products will be used in laboratory for some classes on trial basis. Program has been taken over by another undergraduate group after my graduation for further development of both research and business

#### **University of Hertfordshire (Department of Electrical Engineering)**

Hertfordshire, UK

Practical Skills Training Course for Fudan University Elite Engineering Students

Aug. 2015

#### **Intelligent Home Control System Based on Kinect (Mini project)**

 Setting smart home and corresponding gesture control based on C# to manipulate various electrical appliances on Microsoft Smart Home Server

# **WORK EXPERIENCE**

# **Graduate Teaching Assistant** CS 1044: Intro Program in C

Virginia Tech

Aug. 2018 – Present

#### **Financial Engineering Intern**

Yaozhi Asset Management Co., LLP.

Participated in alpha strategy analysis. Realized short-term price-volume multi-factors model.

Apr. 2018 – Jul. 2018

Optimized backtest platform. Maintained portfolio management system.

# **EXTRACURRICULAR ACTIVITIES**

#### **School Overwatch team**

Fudan University

Team leader, Fudan E-sports Club

Sep. 2016 – June 2017

## Dream Ferry workstation for studying overseas

Fudan University

Co-founder

May 2014 – Sep. 2015

Participated in creation of association, organized events to facilitate applying for summer schools abroad

#### **Teaching Monks & Community Development**

Sri Lanka

**LEO Project Foundation** 

May 2016

• Volunteer for teaching Monks and turtle conservation program in Sri Lanka

#### Career & Leadership Development Program

Fudan University

Coach, CEO Global

Sep. 2015 – Jan. 2016

- Served as Coach of "The Way To Success" Career & Leadership Development Program
- Lead team to organize and complete volunteer project

# **ADDITIONAL INFORMATION**

# Languages

Chinese: Native

English: TOEFL 99, GRE V150+Q168+3.0

## **Interests**

- International travel: visited seven countries
- Extreme sports: Scuba diving, Parachuting

# **Computer and Language Skills**

- Coding: Matlab, Python, C, C++, Verilog, LaTex
- Software: Cadence, LTspice