Tianli Zhou
Software Researcher and Developer

Education:

Expect May, 2020 College Station, TX	**Texas A&M University** Department of Electrical and Computer Engineering Ph.D. in Computer Engineering
2015.08 – 2017.07 Knoxville, TN	**The University of Tennessee** Department of Electrical Engineering and Computer Science
2012.09 – 2015.04 Harbin, China	**Harbin Engineering University** MEng of Information and Communication Engineering
2008.09 – 2012.06 Harbin, China	**Harbin Engineering University** BEng of Electro-Information Engineering of Underwater Acoustics

Selected Coursework:

Artificial Intelligence, Machine Learning, Computer System Organization, Software Systems, Algorithms, Data Structures, Introduction to Data Mining, Applied Cryptography

Publications:

Zhou, T., Tian, C. (2019). Fast erasure coding for data storage: a comprehensive study of the acceleration techniques. *ACM Transactions on Storage (TOS).* (Accepted)

Zhou, T., & Tian, C. (February, 2019). Fast erasure coding for data storage: a comprehensive study of the acceleration techniques. In *Proceedings of the 17th USENIX Conference on File and Storage Technologies* (pp. 317-329). USENIX Association.

Mousavi, S., **Zhou, T.**, & Tian, C. (2018, June). Delayed parity generation in MDS storage codes. In *2018 IEEE International Symposium on Information Theory (ISIT)* (pp. 1889-1893). IEEE.

Zhang, Z. Sun, B. **Zhou, T.** (2015). *Windows Programming (Third Edition).* China: Posts & Telecom Press.

Li, Z., Gong, X., **Zhou, T.** (2014). *Introduction to Bitcoin.* China: Posts and Telecom Press.

Full-time Job Experience:

2015.04 – 2015.07 Shenzhen, China	**Baidu. Co** Group of Connected Car Researcher and Developer

- Build customized adb bridge on WinCE platform
- Protobuf based communication with Android APP
- WinCE real-time video/audio stream rendering
- Car head-unit touch event detection and reporting

Personal info:

Address:

326C, Wisenbaker Engineering Building 3128 Texas A&M University College Station, TX 77843

Mobile:

(254) 716-8268

Email:

zhoutianli01@gmail.com

www:

http://tzhou.net

GitHub:

https://github.com/zhoutl1106

Skills:

Skill	Years' Experience	Level
C/C++	11	Proficient
GUI Library (QT, MFC, wxWidget)	4	Proficient
Linux	4	Proficient
Bash/Python	3	Excellent
Java/Android	2	Excellent
Micro controller	2	Excellent

Project Experience:

2017.07 – Present
College Station, TX

Department of ECEN, Texas A&M University
Graduate Research Assistant

Fast erasure coding for data storage: A comprehensive study of the acceleration techniques

- Study current acceleration techniques
- Propose an efficient coding procedure
- Optimize using Simulated annealing and genetic algorithm
- Give a key finding to an unanswered question in the field
- Performance comparison against many reference codes
- Release source code as an open-source software

Delayed parity generation in MDS storage codes

- Proposed a new two-stage delayed parity generation scheme
- Performance evaluation

2015.08 – 2017.07
Knoxville, TN

Department of EECS, University of Tennessee
Graduate Research Assistant

Personal reliable storage system

- Raspberry Pi based hardware nodes
- Failure tolerant erasure code
- NFC and WIFI communication

2014.03 – 2015.03
Harbin, China

School of Science, Harbin Engineering University
Student Software Developer

Grain seed color selection system

- ARM-Linux based hardware platform
- GUI with QT framework
- Serial and network communication

2011.11 – 2012.04
Harbin, China

Harbin Engineering University
Undergrad Student Researcher

Thesis of B.S. Degree: Multi-function signal generator

- Arm-Linux based hardware platform
- DDS signal generator on FPGA
- SPI cross-chip communication
- OpenGL waveform display

2010.10 – 2011.10
Harbin, China

Harbin Engineering University
Student Software Developer

Underwater Acoustic Remote ROV

- TI OMAP-L137 and TI MSP 430 based hardware platform
- PC-end GUI with OpenGL and MFC
- Direct Input joystick control
- Position detection and feed-back PID control

Teaching:

Department of EECS. University of Tennessee
Summer Camp for High-school Students

Summer, 2017

- Raspberry Pi based platform
- Introduction to python programming
- Motion detection using OpenCV

Department of EECS. University of Tennessee
Teaching Assistant

2017 COSC 581, Algorithm

2016 ECE 255, Intro/Logic Design Digital System

2015 - 2016 COSC 130, Computer Organization

Awards and Honors:

- ◆ Feb. 2019, Boston, MA, USA. USENIX FAST'19 student grant
- ◆ Oct. 2011, Dalian, China. The 12th National "Challenge Cup" Collegiate Extracurricular Academic Work Competition, Second prize
- ◆ Jan. 2010, Harbin, China. American Mathematical Modeling Contest, Second prize
- ◆ Sept. 2010, Harbin, China. National Undergrad Electrical Design Contest, Third prize
- ◆ Jun. 2009, Harbin, China. ACM-ICPC Campus Competition of Harbin Engineering University, Second prize

Certifications:

China Qualification Certificate of Computer and Software Technology Proficiency: Software Design Engineer.