Morteza Shoushtari

Graduate Research Assistant

✉ shoushtari.morteza@live.com
➤ Sunnyvale, CA, US
☎ +1 (408) 752-1087
🌐 www.mshoushtari.com
in linkedin.com/in/morteza-shoushtari

SUMMARY

I completed my Ph.D. in Electrical and Computer Engineering from Brigham Young University (BYU) in 2023, specializing in physical layer security and error correction coding in wireless communications. Prior to pursuing my Ph.D., I gained six years of work experience in the tech industry, working as an IT administrator at Huawei Technologies Co., and as a network engineer at JYANE Construction Co. and Persia Cloud Co.

INTERESTS

- Wire/Wireless Networks
- Cloud Computing
- Cryptography, Post-Quantum Cryptosystem, and Physical Layer Security
- Error-Correction Coding (Turbo, Polar, LDPC, and Viterbi coding algorithms)

EDUCATION

Ph.D., Computer Engineering
Dissertation topic: Securing Wireless Communication via Information-Theoretic Approaches: Innovative Schemes and Code Design Techniques
Brigham Young University, Utah, USA

- Years: 2019 - 2023
- GPA: 3.74/4

M.Sc., Information Technology (IT)
Shiraz University, Shiraz, IRAN

- Years: 2011 - 2013

B.Sc., Computer Engineering
Sadjad University of Technology, Mashhad, IRAN

- Years: 2006 - 2010

SELECTED PUBLICATION

- **Morteza Shoushtari**, Farah Arabian and Willie Harrison, "From Privacy Protection to Analyzing Users' Behavior: The Crucial Role of Information Theory in the Metaverse" under review in Proc. IEEE Intermountain Engineering, Technology, and Computing Conference (i-ETC), 2023.
- **Morteza Shoushtari** and Willie Harrison, "Optimizing Finite Blocklength Nested Linear Codes: Using the Worst Code to Find the Best Code", under review in Proc. IEEE Transactions on Information Forensics and Security, 2023.
- **Morteza Shoushtari**, Farah Arabian and Willie Harrison, "Post-Quantum Cryptography Based on Codes: A Game Changer for Secrecy in Aeronautical Mobile Telemetry" in Proc. of the International Telemetry Conference (ITC), Las Vegas, NV, US, Oct. 2022.
- **Morteza Shoushtari** and Willie Harrison, "Secrecy coding in the Integrated Network Enhanced Telemetry (iNET)" in Proc. of the International Telemetry Conference (ITC), Las Vegas, NV, US, Oct. 2021.
- **Morteza Shoushtari** and Willie Harrison, "New Dual Relationships for Error-Correcting Wiretap Codes" in Proc. of IEEE Information Theory Workshop (ITW), Kanazawa, Japan, Oct. 2021.
- Willie Harrison and **Morteza Shoushtari**, "On Caching with Finite Blocklength Coding

for Secrecy over the Binary Erasure Wiretap Channel" in Proc. of IEEE Wireless Telecommunications Symposium (WTS), San Francisco, US, Apr. 2021.

WORK EXPERIENCES	**Brigham Young University, UTAH, USA**	**Jan 2019 - present**

Graduate Research Assistant
- RA with a focus on physical layer security and secrecy/error-correction codes.

IT Dep. HUAWEI Company, Tehran, Iran   **Aug 2016 - Aug 2017**
IT Administrator
- Managed communication networks, monitored network performance, and resolved any technical issues that arose.
- Provided Level 1 support to more than 250 employees.
- Performed installations and configurations of various network devices such as routers, switches, wireless access points, cameras, and video conferencing systems.

IT Dep. JYAN Company, Tehran, Iran   **Jan 2016 - Aug 2016**
Network Engineer
- Managed and maintained communication networks, regularly monitored network performance, and promptly resolved any technical issues.
- Delivered Level 1 support to more than 180 employees.
- Performed installations and configurations of various network devices such as routers, switches, wireless access points, cameras, and video conferencing systems.

IT Dep. Persia Cloud Company, Tehran, Iran   **Jun 2015 - Jan 2016**
Network Engineer
- Installed and configured IAAS and PAAS cloud platforms (2X, IIRAS).
- Installed and configured Microsoft Servers (CRM, SharePoint, Lync).

IT Dep. LOTUS Company, Tehran, Iran   **Nov 2013 - Jun 2015**
Website Developer
- Developed and managed the company's website (lotuslaptop.com).

IT Dep. KARMA Engineering Company, Iran   **Nov 2011 - Nov 2013**
Technical Support
- Managed communication networks and troubleshooted technical issues.
- Delivered Level 1 technical support to more than 50 clients.

MEMBERS AND HONORS	

- Best paper award, International Telemetry Conference, 2022.
- Second best graduate student paper award, International Telemetry Conference, 2021.
- Member of IEEE Communication Society (ComSoc).
- Member of IEEE Information Theory Society (ITSoc).
- Outstanding IT engineer in Huawei Technologies Company, 2017.

CERTIFICATES AND SKILLS	

- Network Certificates:
  o CompTIA A+ and Network+
  o CCNA (Cisco Certified Network Associate)
  o MCITP (Microsoft Certified IT Professional)
  o HCNA (Huawei Certified Network Associate)
- Other skills:
  o Configuration of network devices, such as switches, routers, and network troubleshooting
  o Cloud Computing Architecture such as AWS, 2x (Parallels)
  o C++/Python/Matlab programming