Muslum Ozgur Ozmen

Education

PERIOD	**September 2016 — Present**
DEGREE	**Ph.D. in Computer Science**
ADVISOR	**Dr. Attila Altay Yavuz**
UNIVERSITY	**Oregon State University** — Corvallis, OR, USA

PERIOD	**September 2016 — June 2018**
DEGREE	**Master of Science in Computer Science**
CGPA	**3.96/4.00**
ADVISOR	**Dr. Attila Altay Yavuz**
THESIS	**Low-Cost Standard Public Key Cryptography Services for Wireless IoT Systems**
UNIVERSITY	**Oregon State University** — Corvallis, OR, USA

PERIOD	**September 2012 — June 2016**
DEGREE	**Bachelor of Science in Electrical and Electronics Engineering**
CGPA	**3.49/4.00**
UNIVERSITY	**Bilkent University** — Ankara, Turkey

Research Interests

My primary interests include light-weight cryptography for IoT systems (drones and medical devices), privacy enhancing technologies (dynamic symmetric and public key based searchable encryption) and post-quantum cryptography.

Work Experience

PERIOD	**January 2018 — March 2018**
EMPLOYER	**Oregon State University** — Corvallis, OR, USA
JOB TITLE	**Teaching Assistant**
	CS496 - Mobile and Cloud Software Development
PERIOD	**September 2017 — December 2017**
EMPLOYER	**Oregon State University** — Corvallis, OR, USA
JOB TITLE	**Teaching Assistant**
	CS261 - Data Structures
	CS/ECE578 - Cyber-security
PERIOD	**January 2017 — March 2017**
EMPLOYER	**Oregon State University** — Corvallis, OR, USA
JOB TITLE	**Teaching Assistant**
	CS492 - Mobile Software Development
PERIOD	**September 2016 — Present**
EMPLOYER	**Oregon State University** — Corvallis, OR, USA
JOB TITLE	**Research Assistant**

Publications

Peer-reviewed conference publications:

C1   Rouzbeh Behnia, Attila A. Yavuz and **Muslum Ozgur Ozmen**. *High-Speed High-Security Public Key Encryption with Keyword Search.* In DBSec: IFIP Annual Conference on Data and Applications Security and Privacy 2017.

C2   **Muslum Ozgur Ozmen** and Attila A. Yavuz. *Low-Cost Standard Public Key Cryptography Services for Wireless IoT Systems.* In IoTS&P: Workshop on Internet of Things Security and Privacy 2017 (Affiliated with ACM CCS).

C3   **Muslum Ozgur Ozmen**, Thang Hoang and Attila A. Yavuz. *Forward-Private Dynamic Searchable Symmetric Encryption with Efficient Search.* In IEEE ICC: International Conference on Communications 2018.

C4   **Muslum Ozgur Ozmen** and Attila A. Yavuz. *Compact Energy and Delay-Aware Authentication.* In IEEE CNS: IEEE Conference on Communications and Network Security 2018.

C5   **Muslum Ozgur Ozmen** and Attila A. Yavuz. *Dronecrypt-An Ultra-Low Energy Cryptographic Framework for Small Aerial Drones.* To Appear In IEEE MILCOM: Military Communications Conference 2018.

C6   Rouzbeh Behnia, **Muslum Ozgur Ozmen**, Attila A. Yavuz and Mike Rosulek. *TACHYON: Fast Signatures from Compact Knapsack.* To Appear In ACM CCS: Conference on Computer and Communications Security 2018.

Peer-reviewed journal publications:

J1   Rouzbeh Behnia, **Muslum Ozgur Ozmen** and Attila A. Yavuz. *Lattice-Based Public Key Encryption with Keyword Search.* Under Review In IEEE TDSC: IEEE Transactions on Dependable and Secure Computing.

J2   Thang Hoang, **Muslum Ozgur Ozmen**, Yeongjin Jang and Attila A. Yavuz. *Hardware-Supported ORAM in Effect: Practical Oblivious Search and Update on Very Large Dataset.* To Appear In PoPETS: Proceedings on Privacy Enhancing Technologies 2019.

Patents

P1   **Muslum Ozgur Ozmen**, Hoang Thang, and Attila A. Yavuz *Forward-Private Dynamic Searchable Symmetric Encryption with Efficient Search*, OSU-17-55, Provisional Application No: 62/572,339, Submitted: October 10, 2017

Presentations

Conference and Workshop Talks:

T1   *Low-Cost Standard Public Key Cryptography Services for Wireless IoT Systems.* Workshop on Internet of Things Security and Privacy. Dallas, TX, USA, November 2017.

Invited Talks:

I1   *Lightweight, Delay-Aware and Scalable Cryptographic Services for Smart-Grid Systems.* Cyber Resilient Energy Delivery Consortium (CREDC) Pacific Northwest Industry Workshop. Richland, WA, USA, November 2017.

Services

- Reviewer in Journal of Ambient Intelligence and Humanized Computing - Springer, 2018

- External Reviewer in ACSAC 2017, 2018

- External Reviewer in DBSec 2017, 2018

- External Reviewer in SmartGridComm 2018

Awards and Honors

- Sharpeye - Acoustic Localization of Gunshot, funded by The Scientific and Technological Research Council of Turkey, 2016.

- Turkish Educational Foundation, Outstanding Success Scholarship (awarded to 50 students nationwide), September 2013 — June 2016.

- Full Scholarship from Bilkent University, September 2012 — June 2016.

- 467th out of 1,805,433 students in Turkish National University Entrance Exam, June, 2012.