

- ◇ **Embedded Programmer & Researcher, Internship** Jun 2013 – Sep 2013
Institute for Infocomm Research, Singapore
Under the supervision of Dr. Ge Yu
 - Improved and implemented Guaranteed Time Slot MAC protocol on wireless sensor networks
 - ◇ **Software Developer & Researcher, Part-time** Jan 2013 – Jun 2013
AVEA Telecommunication, Turkey
Under the supervision of Dr. Engin Zeydan
 - Conducted research on caching in base-stations
 - ◇ **Software Developer & Researcher, Internship** Jun 2012 – Sep 2012
Data Storage Institute, Singapore
Under the supervision of Dr. Zhu Yongqing
 - Implemented a search engine in a forum website, with Java and some part of the backend with C language
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REFEREED
BOOK
CHAPTERS

- ◇ **1.** N. Saputro, S. Tonyali, A. Aydeger, K. Akkaya, M. Rahman, and S. Uluagac, “A Review of Moving Target Defense Mechanisms for Internet of Thing”, Book Chapter in *Modeling and Design of Secure Internet of Things*, Wiley-IEEE Press, 2020 (To Appear).
 - ◇ **2.** K. Akkaya, , A. Uluagac, A. Aydeger and A. Mohan, “Secure Software-Defined Networking Architectures for the Smart Grid”, Book Chapter in *Smart Grid: Networking, Data Management, and Business Models (2017)*, edited by H. Mouftah.
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REFEREED
JOURNAL
PAPERS

- ◇ **1.** A. Aydeger, M. Hossein, M. A. Rahman, and. K. Akkaya, “Strategic Defense against Stealthy Link Flooding Attacks: A Signaling Game Approach”, in *IEEE Transactions on Network Science and Engineering* (under review).
 - ◇ **2.** A. Aydeger, N. Saputro and K. Akkaya, “A Moving Target Defense and Network Forensics Framework for ISP Networks using SDN and NFV”, in *Future Generation Computer Systems*, Vol. 94, pp. 496-509, 2019.
 - ◇ **3.** A. Aydeger, N. Saputro, K. Akkaya and A. Uluagac, “SDN-enabled recovery for Smart Grid teleprotection applications in post-disaster scenarios”, in *Journal of Network and Computer Applications*, Vol. 138, pp. 39-50, 2019.
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REFEREED
PROCEEDINGS

- ◇ **1.** A. Aydeger, N. Saputro, K. Akkaya, “Utilizing NFV for Effective Moving Target Defense against Link Flooding Reconnaissance Attacks”, in the *Proceedings of Military Communications (Milcom)*, Los Angeles, FL, Oct. 2018.
- ◇ **2.** A. Aydeger, N. Saputro, K. Akkaya, “Assessing the Overhead of Authentication during SDN-Enabled Restoration of Smart Grid Inter-substation Communications”, in the *Proceedings of Consumer Communications & Networking Conference (CCNC)*, Las Vegas, NV, Jan. 2018.
- ◇ **3.** A. Aydeger, N. Saputro, K. Akkaya and M. Rahman, “Mitigating Crossfire Attacks using SDN-based Moving Target Defense”, in the *Proceedings of IEEE Local Computer Networks (LCN'16)*, Dubai, UAE, Nov. 2016.

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- ◇ 4. A. Aydeger, K. Akkaya, M. Cintuglu, A. Uluagac, and O. Mohammed, “Software Defined Networking for Resilient Communications in Smart Grid Active Distribution Networks”, in the *Proceedings of IEEE International Conference on Communications (ICC'16)* Kuala Lumpur, Malaysia, June 2016.
- ◇ 5. A. Aydeger, K. Akkaya, and A. Uluagac “SDN-based Resilience in Smart Grid”, in the *Proceedings of NFV & SDN Conference Demos 2015*, San Francisco, CA, Nov. 2015.
- ◇ 6. K. Akkaya, A. S. Uluagac and A. Aydeger “Software Defined Networking for Wireless Local Networks in Smart Grid”, in the *Proceedings of IEEE Local Computer Networks Workshops 2015*, Clearwater, FL, Oct. 2015.
- ◇ 7. A. Aydeger, E. Ghaleb, S. Oktug, “An energy efficient routing technique and implementation in WSNs”, in the *Proceedings of 22nd Signal Processing and Communications Applications Conference (SIU)*, Trabzon, Turkey, Apr 2014.

REVIEWER
ROLES

- ◇ IEEE Communications Surveys & Tutorials
- ◇ IEEE Transactions on Mobile Computing
- ◇ Elsevier Future Generation Computer Systems
- ◇ Elsevier Journal of Network and Computer Applications
- ◇ Elsevier Computer Networks
- ◇ IEEE Conference on Local Computer Networks
- ◇ IEEE Vehicular Technology Conference
- ◇ IEEE Military Communication

TEACHING
EXPERIENCE

- ◇ **Course Taught**
 - EEL 3712L: Logic Design Lab (Fall 2018, Summer 2019, Fall 2019)
- ◇ **Courses TAed**
 - EEL 5718: Computer Communication Networks (Fall 2016, 2017, 2018, 2019)
 - TCN 5271: Ubiquitous & Embedded Sensor Network Centric Telecommunications (Spring 2016, 2017, 2018, 2019)
 - TCN 4211: Telecommunication Networks (Spring 2016, 2017, 2018)

UNIVERSITY
SERVICE

- ◇ **Committee:** Conference for Undergraduate Research at FIU (CURFIU) 2019, Serving as Judge

AWARDS &
HONORS

- ◇ **Florida International University Teaching Assistantship** (2016 - 2020)
- ◇ **Florida International University Teaching Assistantship** (2015 - 2016)
- ◇ **Singapore International Pre-Graduate Award (SIPGA) from A*STAR** (Jun - Sep 2013)
- ◇ **Singapore International Pre-Graduate Award (SIPGA) from A*STAR** (Jun - Sep 2012)

- TALKS AND DEMOS
- ◇ Secure Miami Conference, Florida International University (FIU) – Miami, FL, February 9, 2019
Network Protection Against DDoS Attacks Using SDN and NFV
 - ◇ Florida Institute for Cybersecurity (FICS) Annual Conference on Cybersecurity, University of Florida - Gainesville, FL, March 7-8, 2017
A Moving Target Defense and Network Forensics Framework for ISP Networks using SDN and NFV
 - ◇ Secure Evolvable Energy Delivery Systems, Florida International University (FIU) – Miami, FL, January 19 2017
Post-Disaster SDN-Enabled Network Security
 - ◇ Attended personally and presented all accepted conference papers listed above
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- COMPUTER SKILLS
- ◇ **Programming Languages:** Python, Java, C, C++, VHDL
 - ◇ **Simulation/Emulation Environments:** Mininet, ns-3, GENI
 - ◇ **Tools:** Floodlight SDN Controller, VM VirtualBox, Wireshark, scapy, Eclipse IDE, Matlab