Umit Karabiyik

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Assistant Professor of Computer Science Department of Computer Science College of Sciences and Engineering Technology

Degrees Earned

Ph.D. in Computer Science, Florida State University, 2015M.S. in Computer Science, Florida State University, 2010B.S. in Computer Systems Teaching, Sakarya University, 2006

Peer-Review Publications and Artistic Performances/Exhibitions

<u>Journals</u>

Sablatura, J. and Karabiyik, U., "Pokémon GO Forensics: An Android Application Analysis", Information, 2017, 8, 71.

Karabiyik, U., Canbaz, M.A., Aksoy, A., Tuna, T., Akbas, E., Gonen, B., and Aygun, R., "A Survey of Social Network Forensics", *Journal of Digital Forensics, Security and Law (JDFSL)*, 2016.

Tuna, T., Akbas, E., Aksoy, A., Canbaz, M.A., **Karabiyik, U.,** Gonen, B., and Aygun, R., "User characterization for online social networks", *Social Network Analysis and Mining*, 6(1):104, 2016.

Karabiyik, U. and Aggarwal, S., "AUDIT: Automated Disk Investigation Toolkit", *Journal of Digital Forensics, Security and Law (JDFSL)*, Vol. 9, Issue 2, p:129-144, 2014.

<u>Chapters</u>

Karabiyik, U. and Akkaya, K., "Digital Forensics in IoT and WSNs", Book chapter in The Philosophy of Mission-Oriented Wireless Sensor Networks, Springer. In print.

Karabiyik, U. and Aggarwal, S., "Advanced Automated Disk Investigation Toolkit", *Advances in Digital Forensics XII*, G. Peterson and S. Shenoi (Eds.), Springer, Heidelberg, 2016. (ISBN: 978-3-319-46278-3)

Houshmand, S., Aggarwal, S. and **Karabiyik, U.,** "Identifying passwords stored on disk", *Advances in Digital Forensics XI*, G. Peterson and S. Shenoi (Eds.), Springer, Heidelberg, 2015. (ISBN: 978-3-319-24122-7)

Proceedings

Rabieh, K., Akkaya, K., **Karabiyik, U**. and Qamruddin, J, "A Secure and Cloud-based Medical Records Access Scheme for on-Road Emergencies", *IEEE Consumer Communications & Networking Conference (CCNC)*. In print.

Karabiyik, U. and Karabiyik, T., "Digital Forensics Tool Selection with Multi-armed Bandit Problem", *ADFSL Conference on Digital Forensics, Security and Law,* Daytona Beach, USA, 2017.

Karabiyik, U. and Agarwal, S., "Model of Hierarchical Disk Investigation", 4th International Symposium on Digital Forensics and Security (ISDFS), pp. 84-88. IEEE, 2016

Sablatura, J. and **Karabiyik, U.,** "The Forensic Effectiveness of Disk Sanitization within Virtual Disks", 4th International Symposium on Digital Forensics and Security (ISDFS), pp. 126-131. IEEE, 2016

Work or Professional Experiences

2015 – Present, Assistant Professor of Computer Science, Sam Houston State University
2012-2015, Graduate Teaching Assistant, Florida State University, Tallahassee, FL
2011-2012, Graduate Assistant in Professional, Florida State University, Tallahassee, FL
2005-2007, Computer Science Teacher, Sakarya University Private Schools, Sakarya, Turkey
2005-2006, Software Developer Intern (paid), Sakarya University, Sakarya, Turkey
2003-2006, System Administrator, Sakarya University, Sakarya, Turkey

Honors and Awards

Outstanding ACM Chapter (SHACS) Advisor, Sam Houston State University, 2017 Best Paper Award, 4th International Symposium on Digital Forensics and Security, 2016 Honorable Mention Innovation Award, Association for Academic Advancement, 2014 Graduate Student Full Assistantship, Florida State University, 2011 Graduate Student Full Scholarship, Republic of Turkey Ministry of National Education, 2007

Grants

Intramural Grants

Technology Enhanced Mandatory Recitation Sessions, Teaching Innovation Grant, Sam Houston State University, PI: Umit Karabiyik, Award: \$5,200, November 2017-August 2018

Faculty Research Grant, *"Digital Forensics Tool Ranking with Multi-armed Bandit Problem"*, PI: Umit Karabiyik, Award: \$5,000, May 2016 – August 2016

Extramural Grants

NIJ-2016-8976, *"Targeted Forensic Data Extraction from Mobile Devices"*, Co-PI: Umit Karabiyik. My share \$131,000. 2016.

Other Competencies

Journal Editorial Board

Associate Editor, Journal of Digital Forensics, Security and Law (JDFSL) Associate Editor, International Journal of Forensic Sciences (IJFSC)

Technical Program Committee:

IFIP Working Group 11.9 on Digital Forensics International Conference on Digital Forensics and Cyber Crime ADFSL Conference on Digital Forensics, Security and Law International Symposium on Digital Forensics and Security International Workshop on Cloud Security and Forensics IEEE CNS-CPS-Sec: International Workshop on Cyber-Physical Systems Security IEEE-International Conference on Computing, Networking and Communications

Reviewer:

Reviewer, PLOS ONE (Journal) The Philosophy of Mission-Oriented Wireless Sensor Networks (Book chapter) The Journal of Digital Forensics, Security and Law Tsinghua Science and Technology (Journal) Security and Communication Networks (Journal) IEEE International Conference on Communications International Journal of Security and Networks

Advising:

Faculty Member, College Excellence in Award Committee, College of Science and Engineering Technology, SHSU, 2017 Advisory Board Member, Florida A&M University Cyber Center, 2016 Faculty Liaison between Huntsville Police Department and Department of Computer Science, 2016 Faculty Member, Who's Who Selection Committee, Sam Houston State University, 2016 Faculty Advisor, SHSU ACM Student Chapter (SHACS), 2016 Faculty Member, Graduate Curriculum Committee, 2015 Faculty Member, Undergraduate Curriculum Committee, 2015

Membership:

Trainee Affiliate, American Academy of Forensic Sciences IEEE Membership Association of Computing Machinery (ACM) Association of Digital Forensics, Security and Law European Alliance for Innovation The Institute for Computer Sciences, Social Informatics and Telecommunications Engineering The Association for Academic Advancement (ASACAD) Scholars

Volunteering:

Judge, the Most Robust Design in 2015 Pay Dirt, BEST Robotics Competition, Southeast Texas Hub