

Ahmed Saeed (Ahmed Said Mohamed Tawfik Issa)

CONTACT INFORMATION	Office: 32 Vassar Street, 32-G930 Mailing address: 384 Medford St # 1, Malden, MA (02148)	+1 (678) 925-8050 asaheed@csail.mit.edu https://saeed.github.io
EDUCATION	Georgia Institute of Technology , Atlanta, Georgia, USA PhD in Computer Science August 2019 <ul style="list-style-type: none"><i>Dissertation</i>: Scalable Network Scheduling in Software<i>Advisors</i>: Mostafa Ammar and Ellen W. Zegura<i>Committee</i>: Mostafa Ammar, Ellen W. Zegura, Ada Gavrilovska, Amin Vahdat, Jun Xu Georgia Institute of Technology , Atlanta, Georgia, USA Master's of Science in Computer Science May 2018 <ul style="list-style-type: none">Specialization: Computing Systems Alexandria University , Alexandria, Egypt Bachelor's of Science, Computer and Systems Engineering July 2010	
HONORS AND AWARDS	Google PhD Fellowship in Systems and Networking (2017-2019). Third place in Student Research Competition (SRC) at MobiCom 2011. Second place in undergraduate Student Research Competition (SRC) at MobiCom 2009. Travel grants to attend: MobiSys'17 and PerCom'12.	
PROFESSIONAL EXPERIENCE	Massachusetts Institute of Technology , Cambridge, Massachusetts, USA <i>Postdoctoral Associate</i> Mentor: Mohammad Alizadeh Sep. 2019 - now Google Inc. , Sunnyvale and Mountain View, CA, USA. <i>Student Researcher</i> Host: Nandita Dukkupati Aug. 2018 - Dec. 2018 <i>Software Engineering Intern</i> Host: Nandita Dukkupati May 2018 - Aug. 2018 <i>Software Engineering Intern</i> Host: Nandita Dukkupati May 2016 - Jan. 2017 <i>Software Engineering Intern</i> Host: Jing Ai May 2015 - Aug. 2015 Carnegie Mellon University Qatar and Qatar University , Doha, Qatar. <i>Research Fellow</i> Nov. 2013 - July 2014 Egypt-Japan University for Science and Technology , Alexandria, Egypt <i>Research Assistant</i> July 2010 - Aug. 2013 Nile University , Cairo, Egypt <i>Research Assistant</i> July 2009 - Aug. 2009	
CONFERENCE PUBLICATIONS	17. Eiffel: Efficient and Flexible Software Packet Scheduling USENIX NSDI 2019 <i>Ahmed Saeed</i> , Yimeng Zhao, Nandita Dukkupati, Ellen Zegura, Mostafa Ammar, Khaled Harras, Amin Vahdat 16. zD: A Scalable Zero-Drop Network Stack at End Hosts ACM CoNEXT2019 Yimeng Zhao, <i>Ahmed Saeed</i> , Ellen Zegura, Mostafa Ammar 15. Unison: Enabling Content Provider/ISP Collaboration using a vSwitch Abstraction IEEE ICNP 2019 Yimeng Zhao, <i>Ahmed Saeed</i> , Mostafa Ammar, Ellen Zegura	

14. **Characterizing the Effects of Rapid LTE Deployment: A Data Driven Analysis**
IEEE/IFIP TMA 2019
Kareem Abdullah, Noha Othman Korany, Ayman Khalafallah, Ahmed Saeed, Ayman Gaber
13. **If you can't beat them, augment them: Improving Local WiFi with Only Above-driver Changes**
IEEE ICNP 2018
Ahmed Saeed, Mostafa Ammar, Ellen Zegura, Khaled Harras
12. **Carousel: Scalable Traffic Shaping at End-Hosts**
ACM SIGCOMM 2017
Ahmed Saeed, Nandita Dukkupati, Vytautas Valancius, Vinh The Lam, Carlo Contavalli, Amin Vahdat
11. **Local and Low-cost White Space Detection**
IEEE ICDCS 2017
Ahmed Saeed, Khaled Harras, Ellen Zegura, Mostafa Ammar
10. **Argus: Realistic Target Coverage by Drones**
ACM/IEEE IPSN 2017
Ahmed Saeed, Ahmed Abdelkader, Mouhyemen Khan, Azin Neishaboori, Khaled Harras, Amr Mohamed
9. **The Inapproximability of Illuminating Polygons by α -Floodlights**
CCCG 2015
Ahmed Abdelkader, Ahmed Saeed, Khaled Harras, Amr Mohamed
8. **Up and Away: A Visually-Controlled Easy-to-Deploy Wireless UAV Cyber-Physical Testbed**
IEEE WiMob 2014
Ahmed Saeed, Azin Neishaboori, Khaled Harras, Amr Mohamed
7. **Low complexity target coverage heuristics using mobile cameras (short paper)**
IEEE MASS 2014
Azin Neishaboori, Ahmed Saeed, Khaled Harras, Amr Mohamed
6. **On Target Coverage in Mobile Visual Sensor Networks**
ACM MOBIWAC 2014
Azin Neishaboori, Ahmed Saeed, Khaled Harras, Amr Mohamed
5. **Location-Aware Probabilistic Route Discovery for Cognitive Radio Networks**
IEEE WCNC 2014
Ahmed Elbagori, Ahmed Saeed, Moustafa Youssef
4. **A Low-Cost Large-Scale Framework for Cognitive Radio Routing Protocols Testing**
IEEE ICC 2013
Ahmed Saeed, Mohamed Ibrahim, Khaled Harras, Moustafa Youssef
3. **Unconventional TV Detection using Mobile Devices**
IARIA UBICOMM 2013
Mohamed Ibrahim, Ahmed Saeed, Moustafa Youssef, Khaled Harras
2. **Robust WLAN Device-free Passive Motion Detection**
IEEE WCNC 2012
Ahmed E. Kosba, Ahmed Saeed, Moustafa Youssef,
1. **RASID: A Robust WLAN Device-free Passive Motion Detection System**
IEEE PerCom 2012
Ahmed E. Kosba, Ahmed Saeed, Moustafa Youssef,
4. **On Realistic Target Coverage by Autonomous Drones**
ACM Transactions on Sensor Networks 2019
Ahmed Saeed, Ahmed Abdelkader, Mouhyemen Khan, Azin Neishaboori, Khaled Harras, Amr Mohamed
3. **Toward Dynamic Real-time Geo-location Databases for TV white Spaces**
IEEE Network 2015
Ahmed Saeed, Mohamed Ibrahim, Khaled Harras, Moustafa Youssef

	<p>2. Ichnaea: A Low-overhead Robust WLAN Device-free Passive Localization System IEEE Journal of Selected Topics in Signal Processing 2014 <u>Ahmed Saeed</u>, Ahmed E. Kosba, Moustafa Youssef</p> <p>1. Nuzzer: A Large-Scale Device-Free Passive Localization System for Wireless Environments IEEE Transactions on Mobile Computing 2013 Moustafa Seifeldin, <u>Ahmed Saeed</u>, Ahmed E. Kosba, Moustafa Youssef, Amr El-Keyi</p>
WORKSHOP PUBLICATIONS	<p>3. Vision: The Case for Symbiosis in the Internet of Things ACM MCS 2015 in conjunction with ACM MobiCom <u>Ahmed Saeed</u>, Mostafa Ammar, Khaled Harras, Ellen Zegura</p> <p>2. Towards a Characterization of White Spaces Databases Errors: An Empirical Study ACM WiTECH 2014 in conjunction with ACM MobiCom <u>Ahmed Saeed</u>, Khaled Harras, Moustafa Youssef</p> <p>1. Target Coverage Heuristics Using Mobile Cameras Robotic Sensor Networks 2014 part of Cyber-Physical Systems Week Azin Neishaboori, <u>Ahmed Saeed</u>, Amr Mohamed, Khaled Harras</p>
REFEREED POSTERS	<p>3. A Robust Technique for WLAN Device-free Passive Motion Detection ACM MobiCom 2011 Ahmed E. Kosba, <u>Ahmed Saeed</u>, Moustafa Youssef</p> <p>2. Quantifying the Impact of GPU Specific Optimizations: An Experimental Study on a Weather Forecasting Application ACM PACT 2010 <u>Ahmed Saeed</u>, Emad Elwany, Emad Tawadros, Kareem Abdelsalam, Pakinam Yousry, Samia Hafez</p> <p>1. DNIS: A Middleware for Dynamic Multiple Network Interface Scheduling ACM MobiCom 2009 <u>Ahmed Saeed</u>, Karim Habak, Mahmoud Fouad, Moustafa Youssef</p>
RESEARCH DEMOS	<p>1. DNIS: Dynamic Multiple Network Interface Scheduler ACM MobiCom 2009 <u>Ahmed Saeed</u>, Karim Habak, Mahmoud Fouad, Moustafa Youssef</p>
PATENTS	<p>Patent 9800946, "Dynamic real-time TV white space awareness", Khaled Harras, Moustafa Amin Youssef, Mohammed Ibrahim, <u>Ahmed Issa</u>, Granted Oct. 2017.</p> <p>US Patent Application No. 15/411,341, "Device And Method For Scalable Traffic Shaping With A Time-Indexed Data Structure", Carlo Contavalli, Nandita Dukkupati, <u>Ahmed Issa</u>, Vytautas Valancius, filed Jan. 2017.</p> <p>US Patent Application No. 15/411,335, "Device And Method For Scalable Traffic Shaping At A Receiver With A Time-Indexed Data Structure", Carlo Contavalli, Nandita Dukkupati, <u>Ahmed Issa</u>, Vytautas Valancius, filed Jan. 2017.</p>
TEACHING EXPERIENCE	<p>Georgia Institute of Technology,</p> <p><i>Guest Lecturer on Congestion Control in Datacenters</i> Spring 2017, Fall 2017 Advanced Computer Networks (CS 6250)</p> <p><i>Teaching Assistant</i> Fall 2015, Spring 2017 Advanced Computer Networks (CS 6250) Introduction to Computer Networks (CS 8803)</p> <p>Alexandria University, Alexandria, Egypt</p> <p><i>Teaching Assistant/Demonstrator</i> Fall 2010 Introduction to Computers and Programming Programming in C Systems Programming</p>

TECHNICAL
SKILLS

Programming:

- C/C++, Python, Go, Java, Ruby, CUDA, TCL/OTCL, Assembler, FORTRAN, VHDL, Matlab, Shell, JavaScript, GNU make, SQL.

Libraries and frameworks:

- Linux Networking Stack (TCP/IP, QDisc, and wireless), Docker Containers, Kubernetes, AR Drone SDK, GNU Radio, Click Modular Router, Windows Win32 Networking API (Layered Service Provider), MPI, OpenMP, ns2, GTK+, WPF, SWT, SWING.

ACTIVITIES AND
PROFESSIONAL
SERVICES

- Reviewer: IEEE JSAC, IEEE Computer, IEEE Micro, IEEE TVT, Elsevier COMNET, Elsevier Ad Hoc Networks, Elsevier Pervasive and Mobile Computing, and IEEE VTC'15.
- Vice President of Graduate Student Council for College of Computing at Georgia Tech (2015-2016).
- Senator at Graduate Student Senate of the Graduate Student Government Association (2015-2016).
- Software Freedom Day @ Alexandria University 2009 Team Leader.
- Campus Ambassador of *Sun Microsystems* in Alexandria University (2008-2009).
- Class Representative of Computer Science Class 2010, Alexandria University (2006-2007).