

Mohamed Grissa

CONTACT INFORMATION	10 Faxon Ave Apt 914 Quincy, MA, 02169 Cell: (541) 908-2533	<i>E-mail:</i> grissamed@gmail.com <i>Website:</i> https://mohamedgr.github.io/mohamed-grissa <i>Linkedin:</i> linkedin.com/in/mohamedgrissa
EDUCATION	Oregon State University , Corvallis, Oregon USA Ph.D., Electrical and Computer Engineering, September 2018 <ul style="list-style-type: none">• Dissertation Topic: “Location Privacy-Preserving Strategies for Secondary Spectrum Use”• Advisors: Bechir Hamdaoui, and Attila A. Yavuz. Oregon State University , Corvallis, Oregon USA M.S., Electrical and Computer Engineering, June 2015. <ul style="list-style-type: none">• Dissertation Topic: “Location Privacy Preservation for Optimal Sensing in Cognitive Radio Networks”.• Advisor: Bechir Hamdaoui Ecole Supérieure des Communications de Tunis (SUP’COM) , Tunisia B.S., Telecommunications and Computer Networks, October, 2011.	
PROFESSIONAL EXPERIENCE	Circle Internet Financial Services , Boston, Massachusetts, USA <i>Software Engineer - Blockchain</i> 10/2018 - present <ul style="list-style-type: none">• I work on designing and implementing different blockchain technologies into Circle’s internal platform• I participate in establishing and maintaining the environments in which blockchain solutions can be implemented, including development, testing, and production environments• I am also responsible for maintaining a continuous integration pipeline for the development and testing of applications within Circle. Nokia-Bell Labs , Murray Hill, New Jersey, USA <i>Research Intern - Blockchain</i> 06/2017 - 08/2017 <ul style="list-style-type: none">• Designed a digital health solution using blockchain technology.• Designed a consensus mechanism for handling transactions coming to the blockchain• Implemented and deployed a working prototype and a demo of the proposed solution• Implemented automation scripts to deploy virtual machines, install required libraries, and create private Blockchain networks on Geni Cloud• Tools: C/C++, Go, Python, Ethereum, Tendermint, Solidity, AWS, GENI Cloud.• This work resulted in a publication in IEEE INFOCOM 2018 (Top conference) and a patent submitted with Nokia. Oregon State University , Corvallis, Oregon, USA <i>Software Developer</i> 09/2013 - 06/2015 <ul style="list-style-type: none">• I Developed an Android app for ICARDA (UN organization)	

- It helps collecting and managing agricultural data to/from EMBRAPAs (Brazilian governmental organization) database.
- Database: PostgreSQL, has millions of entries
- Tools: Eclipse, Android SDK, PHP.

Orange France Telecom Group, Tunis, Tunisia

Value Added Services Engineer

09/2012 - 08/2013

- Worked closely with the Project Managers on Solutions scoping, customization, and realization.
- Led few projects with team members from different departments (teams > 5 persons)
- Took a lead technical role in the deployment and successful integration of VAS products
- Participated in technical integrations, upgrades and expansions of VAS products.

SupCom, Tunis, Tunisia

Software Developer

01/2012 - 08/2012

- FireSense project, a Specific Targeted Research Project of the European Union's 7th Framework Program Environment.
- Participated in developing and integrating an early warning platform to remotely monitor areas of cultural interest from the risk of fire and extreme weather conditions.
- It includes a user-friendly interface in the control center that provides video on demand, weather condition information, sensors location and Real time data from the fires front and visualization of the fires propagation.
- Tools: QT, C++, Google Maps API, Java, OpenCV.

Telecom ParisTech, Paris, France

Software Developer Intern

01/2012 - 08/2012

- Designed an approach for rapid mapping of flooded areas using satellite images and Machine Learning Techniques
- The project was in cooperation with the Centre National d'Etudes Spatiales (CNES) and the European Spatial Agency (ESA).
- Tools: Satellite images, C++, QGIS, ArcGIS, ESRI, Orfeo toolbox, LibSVM

ACADEMIC
EXPERIENCE

Oregon State University, Corvallis, Oregon, USA

Graduate Research Assistant

09/2013 - 09/2018

- I designed privacy enhancing protocols in wireless networks and systems like cognitive radio networks, spectrum access systems in the 3.5GHz band.
- Published more than 11 research papers in top-notch journals, magazines and conferences and filed a patent.
- Research interests: Networks security and privacy, applied cryptography, cognitive radio networks, Blockchain technology, wireless networks, IoT, mHealth.

Oregon State University, Corvallis, Oregon, USA

Graduate Teaching Assistant

09/2013 - 09/2018

- ECE/CS 372 Introduction to computer networks, an undergraduate course averaging 100 students per term
- ECE/CS 476/576: Advanced Computer Networking: a grad level class averaging 30+ students

Oregon State University, Corvallis, Oregon, USA

Instructor: ECE/CS 372 - Introduction to Computer Networks

06/2014 - 08/2014

- An undergraduate course of 30 students.
- I taught the following topics: computer network principles, fundamental networking concepts, packet-switching and circuit-switching, TCP/IP protocol layers, reliable data transfer, congestion control, flow control, packet forwarding and routing, MAC addressing.
- Duties included also writing homeworks and exams, and grading.

PUBLICATIONS

(Citations: 147, h-index: 8, i10-index: 8 as reported by Google Scholar as of 11/08/2019)

Journal Papers

[1] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, "Location Privacy in Cognitive Radios with Multi-Server Private Information Retrieval," IEEE Transactions on Cognitive Communications and Networking (TCCN), June 2019.

[2] **Mohamed Grissa**, Bechir Hamdaoui and Attila A. Yavuz, "Unleashing the Power of Multi-Server PIR for Enabling Private Access to Spectrum Databases," in IEEE Communications Magazine, vol. 56, no. 12, pp. 171-177, December 2018.

Current impact factor: 10.356

[3] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, "Preserving the Location Privacy of Secondary Users in Cooperative Spectrum Sensing," in IEEE Transactions on Information Forensics and Security (TIFS), vol. 12, no. 2, pp. 418-431, February 2017.

Current impact factor: 6.211

[4] **Mohamed Grissa**, Bechir Hamdaoui and Attila A. Yavuz, "Location Privacy in Cognitive Radio Networks: A Survey," in IEEE Communications Surveys & Tutorials, vol. 19, no. 3, pp. 1726-1760, April 2017.

Current impact factor: 22.973

[5] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, "Location Privacy Preservation in Database-Driven Wireless Cognitive Networks Through Encrypted Probabilistic Data Structures," in IEEE Transactions on Cognitive Communications and Networking, vol. 3, no. 2, pp. 255-266, June 2017.

Conference Papers

[6] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, "TrustSAS: A Trustworthy Spectrum Access System for the 3.5 GHz CBRS Band," IEEE INFOCOM 2019 - IEEE International Conference on Computer Communications, Paris, France, June 2019, pp. 1495-1503.

Acceptance rate: 19.7%

[7] Nikolaos Papadis, Sem Borst, Anwar Walid, **Mohamed Grissa** and Leandros Tassioulas, "Stochastic Models and Wide-Area Network Measurements for Blockchain Design and Analysis," IEEE INFOCOM 2018 - IEEE International Conference on Computer Communications, Honolulu, HI, October 2018, pp. 2546-2554.

Acceptance rate: 19.7%

[8] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, “When the hammer meets the nail: Multi-server PIR for database-driven CRN with location privacy assurance,” 2017 IEEE Conference on Communications and Network Security (CNS), Las Vegas, NV, December 2017, pp. 1-9.

[9] **Mohamed Grissa**, Attila Yavuz and Bechir Hamdaoui, “An efficient technique for protecting location privacy of cooperative spectrum sensing users,” 2016 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), San Francisco, CA, September 2016, pp. 915-920.

[10] **Mohamed Grissa**, Attila A. Yavuz, and Bechir Hamdaoui. “LPOS: location privacy for optimal sensing in cognitive radio networks,” 2015 IEEE Global Communications Conference (GLOBECOM), San Diego, CA, 2015, pp. 1-6.

Acceptance rate: 35%

[11] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, “Cuckoo filter-based location-privacy preservation in database-driven cognitive radio networks,” 2015 World Symposium on Computer Networks and Information Security (WSCNIS), Hammamet, 2015, pp. 1-7.

[12] **Mohamed Grissa**, Riadh Abdelfattah, Gregoire Mercier, Mehrez Zribi, Aicha Chahbi and Zohra Lili-Chabaane, “Empirical model for soil salinity mapping from SAR data,” 2011 IEEE International Geoscience and Remote Sensing Symposium, Vancouver, BC, 2011, pp. 1099-1102.

PAPERS IN REVIEW **Journal Papers**

[13] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, “Anonymous Dynamic Spectrum Access and Sharing Mechanisms for the CBRS Band,” submitted to IEEE Transactions on Mobile Computing (TMC).

Current impact factor: 4.474

CONFERENCE PRESENTATIONS

“An efficient technique for protecting location privacy of cooperative spectrum sensing users,” 2016 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), San Francisco, CA, 2016.

“When the hammer meets the nail: Multi-server PIR for database-driven CRN with location privacy assurance,” 2017 IEEE Conference on Communications and Network Security (CNS), Las Vegas, NV, 2017

PATENTS

[1] **Mohamed Grissa**, Attila A. Yavuz and Bechir Hamdaoui, inventors; Oregon State university, assignee. “Apparatus and method for protecting location privacy of cooperative spectrum sensing users,” U.S. Patent Application 15/902,965, filed August 30, 2018.

[2] **Mohamed Grissa** and Anwar Walid, inventors; Nokia of America Corp, assignee. “Hierarchical weighted consensus for permissioned blockchains,” submitted on November 2018.

ACADEMIC SERVICE **Peer Reviewer**

Conferences

IEEE International Conference on Computer Communications (INFOCOM)	2016-2018
IEEE Global Communications Conference (Globecom)	2016
Annual Computer Security Applications Conference	2018
IEEE Communications Letters	2016-2017

IEEE Wireless Communications Letters	2018
Internet Technology Letters	2018

Journals

IEEE Transactions on Cognitive Communications and Networking	2019
IEEE Transactions on Wireless Communications	2014-2017, 2019
IEEE Transactions on Information Forensics & Security	2018
IEEE Communications Surveys and Tutorials	2017
IEEE Transactions on Vehicular Technology	2017
Elsevier Vehicular Communications Journal	2015

INVITED TALKS & LECTURES	Oregon State University, Graduate Course: ECE 563-Wireless Communications Networks, Spring 2017. Topic: Cognitive radio networks and dynamic spectrum access
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COMPUTER SKILLS	<ul style="list-style-type: none"> • Programming Languages: Java, Python, C/C++, Javascript, Solidity, Go, PHP, Shell • Cloud Platforms: GENI, AWS • AWS Services: Lambda, API Gateway, S3, CloudFormation, SSM, Codebuild, Codepipeline, EC2, CloudWatch, KMS, CloudFront, • Operating Systems: Mac OS, Linux, Windows. • Libraries & Frameworks: Hadoop, MIRACL, Crypto++, numpy, scikit-learn, OpenCV. • Software & IDE: IntelliJ, Wireshark, Eclipse, MATLAB, QT, Git, docker, Netbeans, VMware. • Blockchains: Ethereum, Bitcoin
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AFFILIATIONS	Member of the Institute of Electrical and Electronics Engineers (IEEE)	2016-2018
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LANGUAGES	English: fluent	French: fluent	Arabic: native
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