

Mahmoud M. Hammad*Assistant Professor*

Department of Software Engineering
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 Jordan University of Science and Technology

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<https://hammadmahmoud.github.io/>**EDUCATION****PhD in Software Engineering**

University of California, Irvine

GPA: 4.0

August 2018

Master of Science in Software Engineering

George Mason University, Fairfax, VA

GPA: 3.93

January 2014

Graduate Certificate in Web-Based Software Engineering

George Mason University, Fairfax, VA

Fall 2013

Bachelor of Science in Computer Science

Yarmouk University, Irbid, Jordan

GPA: 3.76

August 2005

RESEARCH INTERESTS

- Software Engineering, Mobile Security, Self-Adaptive Software Systems, Machine Learning

AWARDS & HONORS

- SIGSOFT CAPS Travel grant to attend the ASE 2018
- SIGSOFT CAPS Travel grant to attend the ICSE 2016
- Graduate Research Assistant scholarship from UCI
- Graduate Teaching Assistant scholarship from UCI
- Outstanding student achievement award – GMU, 2013
- Graduate Research Assistant scholarship from GMU
- Fellowship from Jordan University of Science & Technology, 2012 – 2016
- Ranked 1st among the 50 students who graduated on the same term
- Honor student list (Dean's List) – Several times during my bachelor

PUBLICATIONS

- **Mahmoud Hammad**, Hamid Bagheri, and Sam Malek. DELDroid: Determination and Enforcement of Least-Privilege Architecture in Android. *Journal of Systems and Software (JSS)*, November 2018
- **Mahmoud Hammad**, Joshua Garcia, and Sam Malek. *SALMA: Self-Protection of Android Systems from Inter-Component Communication Attacks*. The 33rd IEEE/ACM International Conference on Automated Software Engineering (**ASE 2018**), September 2018, Montpellier, France. (21% acceptance rate)
- Joshua Garcia, **Mahmoud Hammad**, and Sam Malek. *Lightweight, Obfuscation-Resilient Detection and Family Identification of Android Malware*. International Conference of Software Engineering (**ICSE 2018 Journal-first**), May 2018, Gothenburg, Sweden.
- **Mahmoud Hammad**, Joshua Garcia, and Sam Malek.

A Large-Scale Empirical Study on the Effects of Code Obfuscations on Android Apps and Anti-Malware Products.

International Conference of Software Engineering (**ICSE 2018**), May 2018, Gothenburg, Sweden. (20% acceptance rate)

- **Mahmoud Hammad**, Hamid Bagheri, and Sam Malek.

DELDroid: Determination and Enforcement of Least-Privilege Architecture in Android.

Journal of Systems and Software (October 1, 2017)

Institute for Software Research, University of California, Technical report # UCI-ISR-18-2

- Joshua Garcia, **Mahmoud Hammad**, and Sam Malek.

Lightweight, Obfuscation-Resilient Detection and Family Identification of Android Malware.

ACM Transactions on Software Engineering and Methodology (**TOSEM**). Volume 26, No. 3, Article 11 (January 2018)

- **Integrated in the Software Assurance Marketplace (SWAMP) operated by University of Wisconsin–Madison**

- Joshua Garcia, **Mahmoud Hammad**, Negar Ghorbani, and Sam Malek.

Automatic Generation of Inter-Component Communication Exploits for Android Applications.

European Software Engineering Conference and ACM SIGSOFT Symposium on the Foundations of Software Engineering (**ESEC/FSE 2017**), September 2017, Paderborn, Germany. (24% acceptance rate)

- **Mahmoud Hammad**, Hamid Bagheri, and Sam Malek.

Determination and Enforcement of Least-Privilege Architecture in Android.

International Conference of Software Architecture (**ICSA 2017**), Gothenburg, Sweden, April 2017. (22% acceptance rate)

- *Nominated as best paper (6 out of 95 submissions) and invited to the Journal of Systems and Software (JSS)*

EMPLOYMENT HISTORY

January 2019 – Present	Deputy Director of the Center for eLearning and Open Educational Resources Jordan University of Science and Technology
September 2018 – Present	Assistant Professor Software Engineering Department Jordan University of Science and Technology
January 2016 – August 2018	Researcher at Software Engineering & Analysis Lab University of California, Irvine
August 2016 - December 2016	Graduate Teaching Assistant University of California, Irvine
August 2015 - August 2016	Researcher at Software Engineering & Analysis Lab University of California, Irvine
January 2015 - July 2015	Researcher at System Design & Analysis Lab George Mason University Fairfax, VA
May 2013 – December 2014	Mobile Developer The Helen A. Keller Institute Fairfax, VA
April 2006 – December 2011	Senior Oracle Application Developer Computer & Information Center Jordan University of science & technology Irbid, Jordan

August 2005 – March 2006

Software Engineer
 JoVal for IT
 Amman, Jordan

FORMAL PRESENTATIONS

- Invited talk: DELDroid: Determination and Enforcement of Least-Privilege Architecture in Android. OC I.E.E.E CyberSecurity. Tustin, CA. March 2017.

JOURNAL REFEREE

- ACM Transactions on Autonomous and Adaptive Systems (TAAS), 2018.
- Transactions on Software Engineering and Methodology (TOSEM), 2018.
- Journal of Software: Practice and Experience, 2018
- IET Software Journal, 2018
- IET Networks Journal, 2018

EDITORIAL BOARD MEMBER

- **Computer Science and Technology: Current Trends** [[Link](#)]

PROGRAM COMMITTEE

- PC Member, The 10th International Conference on Information and Communication Systems ([ICICS 2019](#)), Irbid, Jordan, June 2019
- PC Member, Artifact Evaluation Committee, 14th International Symposium on Software Engineering for Adaptive and SelfManaging Systems ([SEAMS 2019](#)), Montreal, Canada, May 2019
- PC Member, Artifact Evaluation Committee, 13th International Symposium on Software Engineering for Adaptive and SelfManaging Systems ([SEAMS 2018](#)), Gothenburg, Sweden, May 2018
- PC Member, Artifact Evaluation Committee, 12th International Symposium on Software Engineering for Adaptive and SelfManaging Systems ([SEAMS 2017](#)), Buenos Aires, Argentina, May 2017
- Member, Resilient Autonomic Software Systems ([RASS](#)) project, a group of researchers from UCI and George Mason University (GMU) working on conceptualizing a framework called RASS for self-managing autonomic systems.

REVIEWER SERVICE

- The 12th Workshop on Distributed Software Development, Software Ecosystems and Systems-of-Systems ([WDES](#)), 2018
- The 12th European Conference on Software Architecture ([ECSA](#)), 2018
- The 12th IEEE International Conference on Self-Adaptive and Self-Organizing Systems ([SASO](#)), 2018
- 13th International Symposium on Software Engineering for Adaptive and SelfManaging Systems ([SEAMS 2018](#)), Gothenburg, Sweden, May 2018.
- The 1st International Workshop on App Market Analytics ([WAMA](#)), 2016
- The 13th IEEE International Conference on Autonomic Computing ([ICAC](#)), 2016
- The 10th IEEE International Conference on Self-Adaptive and Self-Organizing Systems ([SASO](#)), 2016
- 4th IEEE/ACM International Conference on Mobile Software Engineering and Systems ([MOBILESoft](#)), 2017
- 11th European Conference on Software Architecture ([ECSA](#)), 2017
- 2nd eCAS Workshop on Engineering Collective Adaptive Systems ([eCAS](#)), co-located with [SASO](#), 2017

TECHNICAL SKILLS

Design Method & Pattern

UML and Architecture Design Tools

Software Development Platforms

Programming Language

COMET Design method using UML 2

Microsoft Visio, Rational Rose, Visual Paradigm

MS .NET framework, Oracle ADF Jdeveloper 11g, Eclipse, Net Beans

Java, Objective-C, C#, ASP.NET, VB .NET, Oracle SQL/PLSQL,

HTML 5, JavaScript, Java EJB 3, Python

Business Intelligence Packages	Oracle BI Discoverer, Oracle BI Designer
Databases	Oracle DBMS, MS SQL, MySQL
Implementation Architecture	MVC architecture using java servlet and struts 2
Mobile Development	Android app development, iOS app development
Web Services	SOAP, RESTful
Network Tools	WireShark, Snort, iptable

TRAINING & CERTIFICATES

- Oracle PL/SQL Developer Certified Associate (OCA).
- C#.NET 2005 at JUST, Irbid, Jordan.
- ASP.NET 2005 at JUST, Irbid, Jordan.
- Microsoft Office SharePoint Server 2007 Configuration at JUST, Irbid, Jordan.
- UML modeling using rational rose at JUST, Irbid, Jordan.
- Project Management Training and Certification Program at Method Corporation using PMI standards.
- Microsoft Project Using PMI Best Practices at Method Corporation, Irbid, Jordan