



PERSONAL INFORMATION

Yehia Abd Alrahman

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Gender Male | Date of birth 1 October 1986 | Nationality Syrian

RESEARCH INTERESTS

My own sphere of special interest in the field of Computer Science is comprised by the challenge of supporting the development of high-quality, correct-by-construction software and systems, featuring predictability, efficiency, re-usability, maintainability and modularity that are essential in contemporary information technology systems (such as embedded systems or service oriented architectures).

CURRENT POSITION

Feb 2017 – Present

Postdoctoral Researcher Fellow

IMT School For Advanced Studies, Italy

SysMA research unit

System Modeling and Analysis.

EDUCATION AND TRAINING

2013–2016

PhD in Computer Decision and System Science

IMT School For Advanced Studies, Italy

A Foundational Theory for Attribute-based Communication

SEPT 2016 – till DEC

Research Intern

Max Planck Institute for Software Systems, Germany

Programming Languages and Verification

Automated Verification and Approximation.

January 2016 – till June

Visiting Research

University of Edinburgh, UK

LFCS Laboratory, School of Informatics

Investigating the impact of attribute-based stochastic process calculi on the study of the dynamics of Collective adaptive systems.

2010–2013

Master in Computer Science

Philadelphia University, Jordan

Thesis Title: Denotational Semantics For Cloud# Language

2004–2009

Bachelor of Science in Computer Engineering

Philadelphia University, Jordan

Graduation Project: Design and Implementation of a Real-Time Obstacles Avoidance Mobile Robot

ADDITIONAL INFORMATION

Publications

On the Power of Attribute-based Communication, FORTE'16, (2016).
Programming of CAS systems by relying on attribute-based Communication, ISOLA'16, (2016).
On Expressiveness and Behavioural Theory of Attribute-based Communication Technical Report, (2015).
A Calculus for Attribute-based Communication, SAC'15, (2015).
Can We Efficiently Check Concurrent Programs Under Relaxed Memory Models in Maude?, WRLA, (2014).

Presentations

Feb'15 A Calculus for Attribute-based Communication, CINA meeting, Turin, Italy.
Apr'15 A Calculus for Attribute-based Communication, SAC'15, Salamanca, Spain.
Dec'15 On Expressiveness and Behavioural Theory of Attribute-based Communication, QUANTICOL meeting, Lucca, Italy.
Jan'16 On the Expressiveness of Attribute-based Communication, PEPA CLUB, Edinburgh, UK.
June'16 On the Power of Attribute-based Communication, FORTE'16, Heraklion, Greece.
Feb'17 A Distributed Coordination Infrastructure for Attribute-based Communication, QUANTICOL meeting, Pisa, Italy.

Peer Reviews COORDINATION 2016 and 2017: subreviewer, FACS 2014: subreviewer, FoCAS@SASO14: subreviewer, and WRLA 2014: additional reviewer

Scholarships and grants

2016 Scholarship from Max Planck Institute for Software Systems for 3-months Internship, Germany, Saarbrücken.
2016 Grant of 50% increase from IMT 638 for 6-months visiting period at the University of Edinburgh, UK.
2016 Erasmus+ Traineeship scholarship for 6-months visiting period at the University of Edinburgh, UK.
2013 PhD in CDSS Scholarship from IMT Institute for Advanced Studies Lucca, Italy.
2010 Master in Computer Science Scholarship from Faculty of Information Technology, Philadelphia University.
2004 B.Sc. in Computer Engineering Scholarship from Faculty of Engineering, Philadelphia University.

Software Open source code from my work on Attribute-based communication can be found on Github:
<https://github.com/lazkany/AbC>
<https://github.com/lazkany/AbCSimulator>

Technical Skills

Theorem prover: coq
Maude: An executable rewriting logic framework
 \mathbb{K} : A rewrite-based executable semantic framework
Programming Languages: Java, C++, C#.NET

Mother tongue	Arabic					
English	C2	C2	C2	C2	C2	C2
Italian	A1	A1	A1	A1	A1	A1