Curriculum Vitae

MOHAMED FAOUZI ATIG
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Head of Division of Computer Systems

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DEGREES

March 2017 Docent (comparable to Habilitation) in Computer Science

Department of Information Technology Uppsala University, Sweden

June 2010 Ph.D. in Computer Science

University of Paris Denis Diderot (Paris 7), France.

Advisor: Prof. Ahmed Bouajjani; co-advisor: Dr. Tayssir Touili.

Phd defense on 7 June 2010

Honors: Mention très honorable (equivalent to first class Honors)

September 2006 M.Sc. in Computer Science

Parisian Master of Research in Computer Science (Master Parisien de Recherche en Informatique in French)

University of Paris Denis Diderot (Paris 7), France

July 2005 Master in (IT) engineering

Ecole Polytechnique de Tunisie, Tunisia.

Major de Promotion (equivalent to highest ranking student)

POST-DOCTORAL FELLOWSHIP

Jul. 2010 – Feb. 2012 Post-Doctoral researcher

Department of Information Technology, Uppsala University, Sweden

EMPLOYMENT

Jun. 2018 – now **Professor**

Department of Information Technology, Uppsala University, Sweden.

(50% research and 50% administration)

Jun. 2018 – now Senior Lecturer

Department of Information Technology, Uppsala University, Sweden.

(50% research, 30% teaching and 20% administration)

Jun. 2014 – May 2018 Associate Senior Lecturer

Department of Information Technology, Uppsala University, Sweden.

(75% research and 25% teaching)

I was 1 of 10 successful candidates out of around 550 applications in a call open to all

natural and engineering sciences

Mar. 2012 – May 2018 Researcher

Department of Information Technology, Uppsala University, Sweden.

(80% research and 20% teaching)

On leave from June 2014

HOSTED POST-DOCS

2014– 2016 Aiswarya Cyriac (Uppsala University)

SUPERVISION OF PHD STUDENTS

2022– now **Stephan Spengler** (Uppsala University)

Subject: Verification of programs running under weak memory models.

Role: main supervisor. Expected defence year 2027.

2021– now **Samuel Grahn** (Uppsala University)

Subject: Methodology for Verification of Concurrent Software.

Role: co-supervisor. Expected defence year 2026.

2019– now Sarbojit Das (Uppsala University)

Subject: Verification of Event-Driven Programs. Role: co-supervisor. Expected defence year 2024.

2015– 2021 **Bui Phi Diep** (Uppsala University)

Subject: On the Verification of Concurrent Programs.

Role: main supervisor. Expected defence January/February 2021.

2014–2019 Amendra Shrestha (Uppsala University)

Subject: Security in Social Media and Large Scale Databases.

Role: co-supervisor. Defended on 17/05/2019.

2013– 2019 **Tuan Phong Ngo** (Uppsala University)

Subject: Verification of Weak Memory Models. Role: main supervisor. Defended on 21/01/2019.

2010– 2018 **Othmane Rezine** (Uppsala University)

Subject: Verification of Sensor and Ad-Hoc Networks.

Role: co-supervisor. Defended on 12/01/2018.

2010–2016 **Carl Leonardsson** (Uppsala University)

Subject: Efficient Techniques For the Verification of Concurrent Programs.

Role: co-supervisor. Defended on 7/11/2016.

2010– 2018 **Yunyun Zhu** (Uppsala University)

Subject: Verification of Cache Coherence Protocols. Role: co-supervisor. Defended on 30/05/2018.

SUPERVISION OF MS STUDENTS (SELECTION)

2022 Yacoub G. Hendi (Uppsala University)

Subject: Parameterized Verification under TSO with Data Types

2020 **Erik Larsson** (Uppsala University)

Subject: Transforming TSO correctness problems to SC

- 2020 **Meriame El Abdellaoui** (Mohammed VI Polytechnic University, Morocco) Subject: *Constrained Automata*
- 2018 Abhishek De (Chennai Mathematical Institute, Chennai, India)
 Subject: Robustness checking for Programs with Self-Invalidation and Self-Downgrade
- 2014 **Bui Phi Diep** (Vietnam National University Hanoi) Subject: *Efficient Solver for String Equations*
- 2013 **Mehdi Seyed Salehi** (Sharif University of Technology) Subject: *The Emptiness Problem for Regular Availability Expressions*
- 2013 **Tuan Phong Ngo** (Uppsala University)
 Subject: Ensuring the correctness of TSO Memory Models
- 2011 Jari Stenman (Uppsala University)
 Subject: Approximating the Shuffle of Context-free Languages to Find Bugs in Concurrent Recursive Programs.

SUPERVISION OF UNDERGRADUATE STUDENTS (SELECTION)

- 2019 **Adwait Godbole** (Indian Institute of Technology, Bombay (IITB)) Subject: *The Decidability of Verification under Promising 2.0*
- 2018 **Shaan Vaidya** (Indian Institute of Technology, Bombay (IITB)) Subject: *Verification of Communicating Timed Systems.*
- 2018 **Jatin Arora** (Indian Institute of Technology, Bombay (IITB))
 Subject: *Verification of programs running under Release-Acquire Sematics*
- 2013 **Magnus Lång** (Uppsala University)
 Subject: *Verification of Concurrent Programs running under PSO.*

- 2013 **Gaurav Saini** (IIT Kanpur) Subject: *Analysis of Message Passing Programs using SMT-Solvers.*
- 2013 **Subham Modi** (IIT Ropar) Subject: *Analysis of Message Passing Programs using SMT-Solvers.*
- 2012 **Kristiina Ausmees** (Uppsala University)
 Subject: *Zone-Based Reachability Analysis of Dense-Timed Pushdown Automata.*
- 2011 **Paulin Fournier** (University of Rennes 1) Subject: *Timed asynchronous programs.*

APPOINTMENTS AND BOARD PARTICIPATION

- 2023- now Head of Division of Computer Systems, Department of Information Technology, Uppsala University
- 2020– 2023 Director of Undergraduate Studies, Department of Information Technology, Uppsala University
- 2018– 2021 Coordinator of the Master Programme in Embedded Systems, Department of Information Technology, Uppsala University
- 2017– 2019 Co-coordinator of the Master Programme in Concurrent and Parallel Programming, Department of Information Technology, Uppsala University
- 2017– 2020 Coordinator of the Automated Reasoning Arena, Department of Information Technology, Uppsala University
 - 2023 External reviewer for European Research Council to the ERC Consolidator Grant 2022
 - 2018 Reviewer of the PhD thesis of Michail Kokologiannakis, Department of Computer Science, TU Kaiserslautern, Germany
 - 2020 Peer reviewer for the Independent Research Fund, Denmark
 - 2019 Member of the grading committee of Ph. D., Petter Ericson, Umeå University, Sweden
 - 2018 Reviewer of the PhD thesis of Marcio Diaz, University Denis Diderot, France
- 2015– 2018 Co-organiser of the UPMARC Multicore Computing Summer School, Department of Information Technology, Uppsala University

DISTINCTIONS AND AWARDS

- 2019 Young Researcher Award in Computing from the Tunisian Academy of Sciences award, Letters and Arts Beit Al-Hikma.
- 2006 2009 PhD Research Grant from the French Government.
- 2000 2006 Excellence Grant from the Tunisian Government.

RESEARCH GRANTS

- 2020-2021 Project member for the *Verification of Multi-Core Real-Time Embedded Software Systems*. Supported by VR, the Swedish Research Council (Project Grant for Indo-Swedish joint network). Funding level 0.7 MSEK.
 - FRÖ Travel Grant. Supported by the Institut Français de Suède. Funding level 750 Euro.
- 2018 2021 Project leader for *Verification of Consistency Models*. Supported by VR, the Swedish Research Council (Project Grant for Junior Researchers). Funding level 3.58 MSEK. (Success rate $\simeq 21\%$)
- 2013 2016 Project leader for *Verification of Weak Memory Models*. Supported by VR, the Swedish Research Council (Project Grant for Junior Researchers). Funding level 3.4 MSEK. (Success rate $\simeq 11\%$)
 - 2009-2018 Project member for the *Verification* track in UPMARC, the *Uppsala Programming for Multicore Architectures Research Centre*. Linnaeus competence centre supported by VR, the Swedish Research Council. Total funding level 60 MSEK.
 - 2015-2019 External Collaborator for the *Energy Efficient Control project*. Supported by EPSRC, the UK's agency for funding research in engineering and the physical sciences. Total funding level 429,107 GBP.
- 2014 2017 Project member for the *Verification of Concurrent Software*. Supported by VR, the Swedish Research Council (Project Grant for Research collaboration India-Sweden). Funding level 0.75 MSEK.
 - 2014 Starting grant supported by the Faculty of Science and Technology, Uppsala University. Total funding level 0.5 MSEK.
 - 2012 Grant funded by the Department of Information Technology for research collaboration with Prof. K Narayan Kumar (India), Prof. Roland Meyer (Germany) and Dr. Pierre Ganty (Spain). Total funding level 150.000 SEK.

RESEARCH-RELATED ACTIVITIES

Publications 89 peer-reviewed publications: 75 international conferences and workshops and 14 in journals. For the current list of publications, see the DBLP entry at http://www.informatik.uni-trier.de/~ley/pers/hd/a/Atig:Mohamed_Faouzi.html

- 2024 Programme Committee member of the 39th Annual ACM/IEEE Symposium on Logic in Computer Science (LICS 2024) (LICS 2024)
- 2024 Programme Committee member of the Object-Oriented Programming, Systems, Languages, and Applications Conference (OOPSLA 2024)
- 2023 Programme Committee member of the 21st International Symposium on Automated Technology for Verification and Analysis (ATVA 2023)
- 2023 Programme Committee member and workshop chair of the 17th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2023)
- 2023 Programme Committee member of the 35th International Conference on Computer Aided Verification (CAV 2023)
- 2022 Programme Committee member of the 23rd International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI 2022).
- 2022 Programme Committee member of the 42nd Foundations of Software Technology and Theoretical Computer Science (FSTTCS 2022)
- 2022 Programme Committee member of the International Conference on Networked Systems (Netys 2022)
- 2022 Programme Committee member of the 16th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2022)
- 2022 Programme Committee member of the 13th International Symposium on Games, Automata, Logics, and Formal Verification (GandALF 2022)
- 2022 Programme Committee member of the 16th International workshop on Reachability Problems (RP 2022)
- 2021 Programme Committee member of the 12th International Symposium on Games, Automata, Logics, and Formal Verification (GandALF 2021)
- 2021 Programme Committee member of the 15th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2021)
- 2021 Programme Committee member of the 19th International Symposium on Automated Technology for Verification and Analysis (ATVA 2021)
- 2021 Programme Committee member of the 48th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2021)
- 2021 Programme Committee member of the International Conference on Networked Systems (Netys 2021)

- 2021 Programme Committee member of the 31st International Conference on Concurrency Theory (CONCUR 2021)
- 2020 Programme Committee member of the International Conference on Networked Systems (Netys 2020)
- 2020 Programme Committee member of the 18th International Symposium on Automated Technology for Verification and Analysis (ATVA 2020)
- 2020 Programme Committee member of the 11th International Symposium on Games, Automata, Logics, and Formal Verification (GandALF 2020)
- 2020 Programme Committee member of the 45th International Symposium on Mathematical Foundations of Computer Science (MFCS 2020)
- 2020 Programme Committee member of the 14th Summer School on Modelling and Verification of Parallel Processes (MOVEP 2020)
- 2019 Programme Committee member of the 10th International Symposium on Information and Communication Technology (SoICT 2019)
- 2019 Programme Committee member of the 17th International Symposium on Automated Technology for Verification and Analysis (ATVA 2019)
- 2019 Programme Committee member of the 19th International Conference on Application of Concurrency to System Design 2019 (ACSD 2019)
- 2019 Programme Committee member of the InternationalSymposium on Dependable Software Engineering Theories, Tools and Applications 2019 (SETTA 2019)
- 2019 Co-chair of the International Conference on Networked Systems (Netys 2019)
- 2019 Programme Committee member of the 13th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2019)
- 2018 Main Organiser of UPMARC Summer School 2018, Uppsala, Sweden.
- 2018 Programme Committee member of the 6th conference on Highlights of Logic, Games, and Automata (Highlights 2018)
- 2018 Programme Committee member of the Ninth International Symposium on Information and Communication Technology (SoICT 2018)
- 2018 Programme Committee member of the Ninth International Symposium on Games, Automata, Logics, and Formal Verification (GandALF 2018)
- 2018 Programme Committee member of the 2018 European Intelligence and Security Informatics Conference (EISIC 2018)

- 2018 Programme Committee member of the 14th African Conference on Research in Computer Science and Applied Mathematics (CARI 2018)
- 2018 Programme Committee member of the 18th International Conference on Application of Concurrency to System Design 2018 (ACSD 2018)
- 2018 Co-chair of the 12th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2018)
- 2017 Programme Committee member of the Eighth International Symposium on Information and Communication Technology (SoICT 2017)
- 2017 Main Organiser of UPMARC Summer School 2017, Uppsala, Sweden.
- 2017 Programme Committee member of the 2017 European Intelligence and Security Informatics Conference (EISIC 2017)
- 2017 Programme Committee member of the 28th International Conference on Concurrency Theory (CONCUR 2017)
- 2017 Programme Committee member of the 15th International Symposium onAutomated Technology for Verification and Analysis (ATVA 2017)
- 2017 Programme Committee member of the 17th International Conference on Application of Concurrency to System Design 2017 (ACSD 2017)
- 2017 Programme Committee member of the 11th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2017)
- 2017 Programme Committee member of the 18th International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI 2017).
- 2017 Tutorials and workshops co-chair of the European Joint Conferences on Theory and Practice of Software (ETAPS 2017).
- 2017 Programme Committee member of the 20th International Conference on Foundations of Software Science and Computation Structures (FoSSaCS 2017).
- 2016 Main Organiser of UPMARC Summer School 2016, Uppsala, Sweden.
- 2016 Programme Committee member of the 2016 European Intelligence and Security Informatics Conference (EISIC 2016)
- 2016 Programme Committee member of the Seventh International Symposium on Information and Communication Technology (SoICT 2016)
- 2016 Programme Committee member of the 10th International Workshop on Verification and Evaluation of Computer and Communication Systems (VECoS 2016)

- 2016 Programme Committee member of the 16th International Conference on Application of Concurrency to System Design 2016 (ACSD 2016)
- 2016 Programme Committee member of the International Conference on Networked Systems (Netys 2016)
- 2016 External Reviewing Committee member of the 43rd Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL 2016)
- 2015 Co-Organiser of UPMARC Summer School 2015, Uppsala, Sweden.
- 2015 Main Organiser of the first UPMARC International workshop on Memory Models (MM'2015)
- 2015 Programme Committee member of 5th IFIP International Conference on Computer Science and Its Applications (CIIA 2015)
- 2015 Programme Committee member of the 2015 European Intelligence and Security Informatics Conference (EISIC 2015)
- 2015 Programme Committee member of the Sixth International Symposium on Information and Communication Technology (SoICT 2015)
- 2014 Co-Organiser of the CP meets Verification 2014 workshop
- 2014 Programme Committee member of the 2014 IEEE Joint Intelligence and Security Informatics Conference (ISI-EISIC 2014)
- 2014 Programme Committee member of the fifth International Symposium on Information and Communication Technology (SoICT 2014)
- 2014 Programme Committee member of the 16th International Workshop on Verification of Infinite-State Systems (Infinity 2014)
- 2013 Programme Committee member of the 33rd Foundations of Software Technology and Theoretical Computer Science (FSTTCS 2013)
- 2013 Programme Committee member and co-organiser of the 7th International workshop on Reachability Problems (RP 2013)
- 2013 Programme Committee member of the 2013 European Intelligence and Security Informatics Conference (EISIC 2013)
- 2013 Programme Committee member of the 15th International Workshop on Verification of Infinite-State Systems (Infinity 2013)
- 2012 Co-chair of the 14th International Workshop on Verification of Infinite-State Systems (Infinity 2012)

2011 Programme Committee member of the 13th International Workshop on Verification of Infinite-State Systems (Infinity 2011)

Sub-reviewer Numerous reviews for competitive and prestigious conferences and journals such as POPL, LICS, CAV, ICALP, STACS, TACAS, LMCS, TCS, DIST. (Around 8-12 reviews each year)

INVITED SPEAKER (SELECTION)

- 2022 Keynote Speaker at the 20th International Symposium on Automated Technology for Verification and Analysis (ATVA 2022).
- 2021 Invoted Speaker at Highlights Spotlight Workshop on Transducers 2021.
- Tutorials Invited speaker at CONFESTA 2018 (joint event comprising the international 2018 conferences CONCUR, FORMATS, QEST, and SETTA).
- 2018 Verification of Distributed Systems (VDS 2018), Essaouira, Morocco
- 2016 Algorithmic Verification of Real-Time Systems Workshop (AVeRTS 2016), Chennai, India
- 2015 International Workshop on Verification of Infinite-State Systems (Infinity 2015), Bangalore, India
- 2015 Workshop on Parameterized Verification (PV 2015), Madrid, Spain
- 2015 Chemistry of Concurrent and Distributed Programming II (CCDP 2015), Agadir, Marocco
- 2015 Automata, Concurrency and Timed Systems Workshop (ACTS 2015), Chennai, India
- 2014 International Symposium on Information and Communication Technology (SoICT 2014), Hanoi, Vietnam
- 2012 Post-Conference Workshop on Verification of Infinite-State Systems (VISS 2012), Hyderabad, India

TEACHING EXPERIENCE

- 2020 2024 **Automata and Computability,** Mohammed VI Polytechnic University, Morocco: Course Manager
- 2020 2021 Algorithms and Data Structures I, Uppsala University: Course Manager

2020 – 2021	Programming Theory, Uppsala University: Course Manager
2019 – 2020	Automata, computability, Mohammed VI Polytechnic University, Morocco: Course Manager
2019 – 2020	Algorithms and Data Structures I, Uppsala University: Course Manager
2019 – 2020	Programming Theory, Uppsala University: Course Manager
2018 – 2019	Algorithms and Data Structures I, Uppsala University: Course Co-Manager
2018 – 2019	Programming Theory, Uppsala University: Course Manager
2017 – 2018	Programming Theory, Uppsala University: Course Manager
2017 – 2018	Automata and Logic in IT System Modelling, Uppsala University: Course Manager
2016 – 2017	Automata and Logic in IT System Modelling, Uppsala University: Course Manager
2016 – 2017	Algorithms and Data Structures I, Uppsala University: Course Manager
2015 – 2016	Algorithms and Data Structures I, Uppsala University: Course Manager
2015 – 2016	Programming Theory, Uppsala University: Course Manager
2014 – 2015	Algorithms and Data Structures I, Uppsala University: Course Manager
2014 – 2015	Programming Theory, Uppsala University: Course Manager
2013 – 2014	Algorithms and Data Structures I, Uppsala University: Course Manager
2013 – 2014	Programming Theory, Uppsala University: Course Manager
2012 – 2013	Programming Theory, Uppsala University: Course Manager
2011 – 2012	Programming Theory, Uppsala University: Course Manager
2008 – 2009	Numerical Analysis, University of Paris7: Teaching Assistant
2008 – 2009	Automata Theory, University of Paris 7: Teaching Assistant
2007 – 2008	Programming Using Java, University of Paris 7:Teaching Assistant
2007 – 2008	Computer Concepts. University of Paris 7: Teaching Assistant

LANGUAGES

Arabic Native Speaker

French Fluent written, read, spoken English Good written, read, spoken

Swedish Beginner