Emilio Tuosto
Curriculum vitae

August 26, 2020

Career to date

Since April 2019 I am an associate professor at the Gran Sasso Science Institute in L'Aquila (Italy).

I got a master degree from the University of Pisa (Italy) in 1998. In Pisa I did also my doctoral studies under the supervision of Prof G. Ferrari; I successfully defended my PhD thesis on the 5th of May 2003.

I worked at the Department of Informatics of Leicester (which I joined in October 2005 as lecturer and where I became associate professor in April 2013).

I have authored about 70 among conference, book chapters, and journal papers and I have served as member of the programme committees of several international conferences and workshops. In 2012 I was the invited speaker of WS-FM which I co-chaired in 2013. I've also been the co-chair of TGC 2014 and of COORDINATION 2019.

Other academic appointments

- 2015 Visiting professor at the University of Cagliari (Italy) for 3 months

- 2011-2012 Visiting professor at the University of Cagliari (Italy) for 3 months

- 2010-2011 Visiting professor at the University of Cagliari (Italy) for 3 months

- 2002/2003 Teaching assistant at the Dipartimento di Matematica, Universita' di Pisa

- 18/04/2002-24/05/2002 Teaching assistant at the Dipartimento di Matematica, Universita' di Pisa

- 01/10/2001-18/12/2001 Teaching assistant at the Dipartimento di Informatica dell'Università di Pisa

- 20/01/2000-20/02/2000 Consultant, Dipartimento di Informatica, Universita' di Pisa

PhD supervision

I am the advisor Alex Coto, PhD student at GSSI.

I have supervised 4 PhD students in Leicester:

- Dr Julien Lange (currently a post-doc at the Imperial College and moving to the University of Kent in September 2017 as lecturer)

- Dr Kyriakos Poyas (currently working in IT industry)

- Dr Qurat Ul Ain Nizamani (currently lecturer at University of Sindh)

- Dr Hyder Ali Nizamani (currently associate professor at University of Sindh)

- Dr Yi Xiao

- Dr Hao Zeng

I have also co-supervised Dr Daniele Strollo, who received his PhD from the IMT institute (Lucca) and now is working in IT industry.

Research projects

Currently I am involved in the following projects:

- **BehAPI**: EU RISE network on behavioural APIs (CO-PI, site and work package leader).

- **RCADE**: Marie SkÅĆodowska-Curie individual fellowship of Dr Claudio Antares Mezzina (CO-PI).

- **IC1405**: EU Cost action on coordinated by Dr Irek Ulidowsky.

In the past I collaborated to several Italian, EU project, and UK projects

2006-2017	**Daphe Jackson** mentor of fellow (Dr Paula Severi - finished)
	BETTY EU Cost Action IC1201 - RTD Framework Programme (research associate - finished)
	MEALS EU FP7 Marie Curie Action, research associate - finished)
	PAIS "Process Algebras for Interaction and Spatiality" (British Council, PI - finished)
	HiDe4SOC "History-dependent automata for SOC" (Nuffield Foundation, PI - finished)
	SENSORIA "Software Engineering for Service-Oriented Overlay Computers" (EC FET: Global Computing, research associate - finished)
	Tracing Networks Levehulme Trust (co-PI - finished)
2003-2004	**PROFUNDIS** "Proofs of Functionality for Mobile Distributed Systems" (EC FET: Global Computing, research associate)
	DEGAS "Design Environments for Global Applications" (EC FET: Global Computing)
	AGILE "Architectures for Mobility" (EC FET: Global Computing)
2002-2003	**NAPOLI** "Network Aware Programming - Objects, Languages, Implementations"
	SP4. Progetto MIUR
2001-2002	**COMETA** "Computational Metamodels"
	NAPI "Network Aware Programming Interoperability" (Microsoft Research Cambridge)
1999-2001	**TOSCA** progetto MIUR.
1998-1999	**CONFER2** "Concurrency and Functions: Evaluation and Reduction"

Academic teaching

I am currently teaching (both at undergraduate and postgraduate students of the Department of Informatics of the University of Leicester). More specifically, I teach

- part of a module on security (protocol analysis and verification) and

- a module on the choreographic design and analysis of distributed applications.

The latter if one of the core module of several MSc degrees related to distributed systems and it has been designed by me.

On my appointment in Leicester I taught a module on theory of concurrency and part of a module on C++ programming. In 2006 I designed a module on concurrent and distributed programming (based on Java) for undergraduate and post-graduate students at Leicester. I taught this module until 2013; this module is still offered to the students in Leicester. My other didactic activities include supervision of undergraduate and postgraduate student projcects. I am also member of several committees ruling aspects of the teaching and I am the MSc progression tutor.
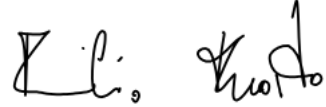
Non-academic experience

I have some experience in training and software development in industrial context.

- 16/10/2000-20/10/2000 Lecturer, DS-NET (Bologna), on behalf of Synapsis (Livorno).

- 19/02/2001-23/03/2001 Lecturer, Istituto Tecnico Commerciale "F. Marchi" (Pescia).

- 25/06/2001-27/06/2001 Lecturer, Telecom Italia (L'Aquila).

- 01/02/2003-25/05/2003 Lecturer, Agenzia Formatica "Comunicare" (Pisa).

- 10/10/1998-19/12/1998 Analyst, DLR Oberpfaffenhofen (Munich), on behalf of Intecs Sistemi (Pisa).

Selected publications

1. Emilio Tuosto, Roberto Guanciale: Realisability of Pomsets. J. Log. Algebr. Meth. Program. Accepted for publication (2019). To appear.

2. Emilio Tuosto, Roberto Guanciale: Semantics of global view of choreographies. J. Log. Algebr. Meth. Program. 95: 17-40 (2018)

3. Adrian Francalanza, Claudio Antares Mezzina, Emilio Tuosto: Reversible Choreographies via Monitoring in Erlang. DAIS 2018: 75-92

4. Roberto Guanciale, Emilio Tuosto: An Abstract Semantics of the Global View of Choreographies. ICE 2016: 67-82

5. Paula Severi, Luca Padovani, Emilio Tuosto, Mariangiola Dezani-Ciancaglini: On Sessions and Infinite Data. Coordination 2016, LNCS 9886. (Nomination for best paper award.)

6. Massimo Bartoletti, Alceste Scalas, Emilio Tuosto, Roberto Zunino: Honesty by Typing. Logical Methods in Computer Science 12(4) (2016)

7. Ramsay Taylor, Emilio Tuosto, Neil Walkinshaw, John Derrick: Choreography-Based Analysis of Distributed Message Passing Programs. PDP 2016. IEEE Computer Society.

8. Julien Lange, Emilio Tuosto, Nobuko Yoshida: From Communicating Machines to Graphical Choreographies. POPL 2015: 22

9. Laura Bocchi, Emilio Tuosto: Attribute-based transactions in service oriented computing. Mathematical Structures in Computer Science 25(3): 619-665 (2015)

10. Kyriakos Poyias, Emilio Tuosto: A design-by-contract approach to recover the architectural style from run-time misbehaviour. Sci. Comput. Program. 100: 2-27 (2015)

11. Laura Bocchi, Hernán C. Melgratti, Emilio Tuosto: Resolving Non-determinism in Choreographies. ESOP 2014: 493-512

12. Massimo Bartoletti, Emilio Tuosto, Roberto Zunino: Contract-Oriented Computing in CO2. Sci. Ann. Comp. Sci. 22(1): 5-60 (2012)

13. Julien Lange, Emilio Tuosto: Synthesising Choreographies from Local Session Types. CONCUR 2012: 225-239

14. Alexander Kurz, Tomoyuki Suzuki, Emilio Tuosto: On Nominal Regular Languages with Binders. FoSSaCS 2012: 255-269

15. Laura Bocchi, Kohei Honda, Emilio Tuosto, Nobuko Yoshida: A Theory of Design-by-Contract for Distributed Multiparty Interactions. CONCUR 2010: 162-176

16. Andrea Bracciali, GianLuigi Ferrari, Emilio Tuosto: A symbolic framework for multi-faceted security protocol analysis. Int. J. Inf. Sec. 7(1): 55-84 (2008)

17. Roberto Bruni, Ivan Lanese, Hernán C. Melgratti, Emilio Tuosto: Multiparty Sessions in SOC. COORDINATION 2008: 67-82

18. GianLuigi Ferrari, Roberto Guanciale, Daniele Strollo, Emilio Tuosto: Coordination Via Types in an Event-Based Framework. FORTE 2007: 66-80

19. Gian Luigi Ferrari, Ugo Montanari, Emilio Tuosto: Coalgebraic minimization of HD-automata for the Pi-calculus using polymorphic types. Theor. Comput. Sci. 331(2-3): 325-365 (2005)

Faithfully
Emilio Tuosto
August 26, 2020