Edon Kelmendi

Birth place: Prishtinë, Kosovë Birth date: 20 May 1989 Nationality: Kosovar

Email: edon.kelmendi@gmail.com Website: http://edon.github.com/ Phone: +33 (0) 618160966

Interests

My interests include Logic, Automata, Games, and Dynamical Systems.

Appointments Held

April 2021 – ... Max Planck Institute for Software Systems

Post-Doc (Researcher).

Advised by: Joël Ouaknine and James Worrell

Post-Doc (Research Associate) in the Verification Team.

Advised by: Joël Ouaknine and James Worrell

Post-Doc (Adiunkt Naukowy) in the Automata Team.

Advised by: Mikołaj Bojaćzyk

Jan 2017 – Jan 2018 **Technical University of Munich**

Post-doc in the Chair for Foundations of Software Reliability and

Theoretical Computer Science

Advised by: Anca Muscholl and Jan Křetínský

Education

2013 – 2016 **Doctorate, LaBRI, Université de Bordeaux**

Thesis title: Optimal Control Under Partial Observation

Advisors: Hugo Gimbert and François Dufour

2011 – 2013 Master, Université de Bordeaux (Formal Methods and Software Verification)

Thesis title: Value 1 Problem for Probabilistic Automata.

Advisor: Hugo Gimbert Mention: Très Bien

2007 – 2010 BEng, Universiteti i Prishtinës

Faculty of Electrical and Computer Engineering

Publications

arXiv links are clickable

Conference Proceedings

1

Almagor, Shaull, Toghrul Karimov, Edon Kelmendi, Joël Ouaknine, and James Worrell. "Deciding ω -Regular Properties on Linear Recurrence Sequences". In: In 48th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2021), January 17–22, 2021. 2021. arXiv: 2010.14432.

- Almagor, Shaull, Edon Kelmendi, Joël Ouaknine, and James Worrell. "Invariants for Continuous Linear Dynamical Systems". In: 47th International Colloquium on Automata, Languages, and Programming, ICALP 2020, July 8-11, 2020, Saarbrücken, Germany (Virtual Conference). 2020, 107:1–107:15. arXiv: 2004.11661.
- Bojańczyk, Mikołaj, Edon Kelmendi, Rafał Stefański, and Georg Zetzsche. "Extensions of ω -Regular Languages". In: LICS '20: 35th Annual ACM/IEEE Symposium on Logic in Computer Science, Saarbrücken, Germany, July 8-11, 2020. 2020, pp. 266–272. arXiv: 2002.09393.
- Bojańczyk, Mikołaj, Edon Kelmendi, and Michał Skrzypczak. "MSO+∇ is undecidable". In: 34th Annual ACM/IEEE Symposium on Logic in Computer Science, LICS 2019, Vancouver, BC, Canada, June 24-27, 2019. 2019, pp. 1–13. arXiv: 1901.06900.
- Kelmendi, Edon, Julia Krämer, Jan Kretínský, and Maximilian Weininger. "Value Iteration for Simple Stochastic Games: Stopping Criterion and Learning Algorithm". In: Computer Aided Verification 30th International Conference, CAV 2018, Held as Part of the Federated Logic Conference, FloC 2018, Oxford, UK, July 14-17, 2018, Proceedings, Part I. 2018, pp. 623–642. arXiv: 1804.04901.
- Bojańczyk, Mikołaj, Hugo Gimbert, and Edon Kelmendi. "Emptiness of Zero Automata Is Decidable". In: 44th International Colloquium on Automata, Languages, and Programming, ICALP 2017, July 10-14, 2017, Warsaw, Poland. 2017, 106:1–106:13. arXiv: 1702.06858.
- Fijalkow, Nathanaël, Hugo Gimbert, Edon Kelmendi, and Denis Kuperberg. "Stamina: Stabilisation Monoids in Automata Theory". In: *Implementation and Application of Automata 22nd International Conference, CIAA 2017, Marne-la-Vallée, France, June 27-30, 2017, Proceedings.* 2017, pp. 101–112. **9** URL: https://edon.github.io/files/stamina.pdf.
- 8 Kelmendi, Edon and Hugo Gimbert. "Deciding Maxmin Reachability in Half-Blind Stochastic Games". In: Algorithmic Game Theory 9th International Symposium, SAGT 2016, Liverpool, UK, September 19-21, 2016. Proceedings. 2016, pp. 52–63. arXiv: 1605.07753.

Journal Articles

Fijalkow, Nathanaël, Hugo Gimbert, Edon Kelmendi, and Youssouf Oualhadj. "Deciding the value 1 problem for probabilistic leaktight automata". In: *Logical Methods in Computer Science* 11.2 (2015). arXiv: 1504.04136.

Preprints

Gimbert, Hugo and Edon Kelmendi. Two-Player Perfect-Information Shift-Invariant Submixing Stochastic Games Are Half-Positional. 2014. arXiv: 1401.6575 [cs.GT].

Teaching

Michaelmas 2020

Probabilistic Model Checking (University of Oxford)

Tutorials (partially online) to master students.

Winter 2016/2017

Logique et Preuve (Université de Bordeaux)

Tutorials and lectures on an introduction to formal logics and coq for third year students.

Coloration Informatique (Université de Bordeaux)
Tutorials on writing a 2D game in python for first year students.

Winter 2015/2016

Informatique Théorique 1 (Université de Bordeaux)

Tutorials and lectures on basic mathematical tools that are useful in computer science for second year students.

Algorithmes et Programmes (Université de Bordeaux)

Tutorials on implementing algorithms in C for second year students.

Community service

Reviewed papers for:

LICS, ICALP, STACS, MFCS, CSL, FSCD, CONCUR, Acta Informatica, Transactions on Computational Logic.

Languages

Albanian

Native

English

Fluent

French

Advanced