






Curriculum vitae

Elli Anastasiadi

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Post-doc at the department of Information Technology,
Uppsala University, Sweden

PERSONAL DETAILS

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h-index: 3  DBLP  ORCID

RESEARCH & EDUCATION

Uppsala University (Ongoing) <i>Postdoc position with the algorithmic program verification group.</i>	Uppsala, Sweden 24/10/2022 - Today
Reykjavik University <i>PhD, ICE-TCS, Supervisors: Luca Aceto, Anna Ingólfssdóttir</i> Thesis title: "Syntactic approaches to negative results in process algebras and modal logics".	Reykjavik, Iceland 22/2/2019 - 10/10/2022
NTUA & NKUA <i>Masters program "Algorithms, Logic and Mathematics" GPA: 9.0/10.0 .</i> Specializations: Logic in computer science.	Athens, Greece Sept 2018 - Feb 2019
National Technical University of Athens (NTUA) <i>5-year diploma (MSc) in Applied Mathematics GPA: 7.9/10.0 .</i> Specializations: Applied statistics, Mathematics of Computer Science. Thesis title: "Parameterized complexity and model checking on bounded families of graphs" (grade: 10/10).	Athens, Greece Sep 2013 - Sep 2018

PUBLICATIONS

JOURNAL PUBLICATIONS

- Non-Negative Decomposition of Multivariate Information: from Minimum to Blackwell Specific Information. May 2024. [DOI][PDF]
With Tobias Mages, and Christian Rohner.
In: **Entropy**
- Axiomatizing recursion-free, regular monitors. June 2022. [DOI] [PDF]
With Luca Aceto, Antonis Achilleos, and Anna Ingólfssdóttir.
In: **Journal of Logical and Algebraic Methods in Programming.**
- On the axiomatisability of priority III: Priority strikes again. October 2020. [DOI] [PDF]
With Luca Aceto, Valentina Castiglioni, Anna Ingólfssdóttir, and Bas Luttik, Mathias Ruggaard Pedersen
In: **Theoretical Computer Science.**

CONFERENCE PUBLICATIONS

- On probabilistic Monitorability. December 2022. [DOI] [PDF]
With Luca Aceto, Antonis Achilleos, Adrian Francalanza, Anna Ingólfssdóttir, Karoliina Lehtinen, and Mathias Ruggaard Pedersen.
In **Principles of Systems Design - Special Issue for Tom Henzinger's 60th Birthday.**
- Complexity through Translations for Modal Logic with Recursion. September 2022. [DOI],[PDF]
With Luca Aceto, Antonis Achilleos, Adrian Francalanza, and Anna Ingólfssdóttir.
In: **GandALF 2022: Games, Automata, Logics, and Formal Verification.**
- Non-Finite Axiomatisability Results via Reductions: CSP Parallel Composition and CCS Restriction. September 2022. [DOI]
With Luca Aceto, Valentina Castiglioni, and Anna Ingólfssdóttir.

- In: **Lecture Notes in Computer Science - Special Issue for Frits Vaandrager's 60th Birthday.**
- Monitoring hyperproperties with circuits. Short paper. June 2022. [DOI] [PDF]
With Luca Aceto, Antonis Achilleos, Adrian Francalanza.
- In: **International Conference on Formal Techniques for Distributed Objects, Components, and Systems.**
- In search of lost time: Axiomatizing parallel composition in process algebras. July 2021. (Invited paper) [DOI] [PDF]
With Luca Aceto, Valentina Castiglioni, Anna Ingólfssdóttir, and Bas Luttik:
- In: **Logic in Computer Science.**
- On the Axiomatizability of Priority III: The Return of Sequential Composition. September 2019. [DOI],[PDF]
With Luca Aceto, Valentina Castiglioni, Anna Ingólfssdóttir, and Mathias Ruggaard Pedersen:
- In: **20th Italian Conference on Theoretical Computer Science.**

UNDER REVIEW.....

- Complexity results for modal logic with recursion via translations and tableaux [PDF]
With Luca Aceto, Antonis Achilleos, Adrian Francalanza, and Anna Ingólfssdóttir.
- Centralized vs Decentralized Monitors for Hyperproperties [PDF]
With Luca Aceto, Antonis Achilleos, Adrian Francalanza, Daniele Gorla, and Jana Wagemaker.

MANUSCRIPTS.....

- Syntactic approaches to negative results in process algebras and modal logics. October 2022. [DOI], [PDF]
PhD thesis
- Parameterized complexity and model checking on bounded families of graphs. October 2018. [DOI],[PDF]
Masters thesis.

INFORMAL & WORKSHOP PUBLICATIONS.....

- PLS 2024 - On the expressiveness of hyperlogics. With Antonis Achilleos, R. Govind, and Jana Wagemaker.
- PLS 2024 - Satisfiability-checking of modal logic with recursion via translations and tableaux. With Luca Aceto, Antonis Achilleos, Adrian Francalanza, and Anna Ingólfssdóttir.
- NWPT 2023 - Infinite hard families of equations in process algebras. With Luca Aceto.
- RADICAL 2023 - Communicating Monitors for Hyper- μ HML. With Antonis Achilleos, Adrian Francalanza, and Jana Wagemaker.
- PLS 2022 - Epistemic logic for verifying runtime verification communication protocols. With Antonis Achilleos, Adrian Francalanza and Jasmine Xuereb.
- NWPT 2021 - Monitoring Hyperproperties with circuits. With Luca Aceto, Antonis Achilleos and Adrian Francalanza.
- NWPT 2019 - Axiomatizing equivalences over regular monitors. With Luca Aceto and Anna Ingólfssdóttir
Online proceedings.
- PLS 2019 - An Axiomatization of Verdict Equivalence over (Closed) Regular Monitors. With Luca Aceto and Anna Ingólfssdóttir.

AWARDS & GRANTS

- (Not funded with grade 84.40%) Marie-Curie European Postdoctoral Fellowship application for project "BeMo: Beyond Monitorability", to be hosted at Aix-Marseille Université. Role: main applicant.
- Reykjavik University Research Fund for the project "REVoCoP: Runtime and Equational Verification of Concurrent Processes". Feb 2022. Total amount: 8000000 ISK. Role: main applicant.
- ACM-W, Women in Computing Scholarship Award 2019 - 1000 USD (towards attending ICALP/LICS).
- Hellenic Mathematical Society, 1st prize in Panhellenic Mathematical Competition Euclid 2009.

RESEARCH ACTIVITIES

MASTER STUDENT SUPERVISION.....

August Bredberg

Spring 2023

"Monitoring software usage and behaviour based on SAAS data: case Gemini Water portfolio".

REVIEWER DUTY.....

ICALP 2019, ICALP 2020, RV 2020, LFCS 2022, STACS 2022, SETTA 2022, STACS 2023, ESOP 2023, CONCUR 2024

COMMITTEES.....

EXPRESS/SOS 2024 <i>Calgary, Canada</i> Program committee	Sep 2024
Panhellenic Logic Symposium <i>Thessaloniki, Greece</i> Scientific & program committee	July 2024
LMW@CSL <i>Naples, Italy</i> Organising committee	Feb 2024
Essays Dedicated to Frits W. Vaandrager on the Occasion of His 60th Birthday <i>Online</i> Program committee	Sep 2022
Logic Colloquium 2022 <i>Reykjavik, Iceland</i> Local organiser	June 2022
The New York Colloquium on Algorithms and Complexity <i>New York, USA (online)</i> Organising committee	Dec 2021
32nd Nordic Workshop on Programming Theory <i>Reykjavik, Iceland</i> Local organiser	Nov 2021

MISC.....

Postdoc Representative <i>Division of Computer Systems, Uppsala University</i>	March 2024 (Ongoing)
SIGLOG monthly newsletter <i>Coordinator</i>	Jan 2024 (Ongoing)
IT-DoCS Seminars <i>Organiser & Chair</i>	Nov 2023 (Ongoing)
Member of the new head of IT-DoCS committee <i>Postdoc representative</i>	Apr 2023

TALKS.....

Nordic Workshop of Programming Theory <i>Västerås, Sweden</i> ○ Talk title: "Infinite hard families of equations in process algebras".	22/11/2013
Athens Colloquium of Algorithms and Complexity <i>Athens, Greece</i> ○ "Data structures for the verification of weak memory models".	26/08/2023
Open Problems in Concurrency Theory <i>Bertinoro, Italy</i> ○ "Verification of weak memory models".	27/06/2023
Formal Methods seminar <i>Marseille, France</i> ○ "Verification of weak memory models".	8/06/2023
Formal Methods seminar <i>Gothenburg, Sweden (online)</i> ○ "Monitoring Hyperproperties with Circuits: Foundation and Extensions".	23/06/2022
Division of Computer Systems seminar <i>Uppsala, Sweden (online)</i> ○ "Monitoring hyperproperties with circuits".	1/6/2022
Henzinger group seminar	10/5/2022

Institute of science and technology, Austria (online)

- “Monitoring hyperproperties with circuits”.

ALMA Masters program seminar

June 2021

Athens, Greece

- “Natural Deduction: From classic to modal logic”.

CoReLab Seminar

June 2020

Athens, Greece

- “The Uppaal model checker”.

Reykjavik University Computer Science Flash Talks

Feb 2020

Reykjavik, Iceland

- “Using equational logic towards formal verification of concurrent systems”.

Nordic Workshop of Programming Theory

Nov 2019

Tallinn, Estonia

- Talk title: “Axiomatizing equivalences over regular monitors”.

Panhellenic Logic Symposium

June 2019

Anogetia, Greece

- Talk title: “An Axiomatization of Verdict Equivalence over Regular Monitors”.

ICE-TCS Theory Day

April 2019

Reykjavik, Iceland

- “Fine-grained complexity”.

ICE-TCS Seminar

March 2019

Reykjavik, Iceland

- “Parameter trade-offs for the Model Checking Problem”.

TEACHING RECORD

Uppsala University, Division of Computer Systems

Oct 2022 - present

Instructor

Uppsala, Sweden

- Modeling and Verification: Spring 2024.
- Real Time Systems (lectures on Modeling and Verification of Timed Automata): Autumn 2022 & 2023
- Study group on Automata, Logics, and Infinite games: Autumn 2023

Reykjavik University

March 2019 - Oct 2022

Department of Computer Science

Reykjavik, Iceland

Instructor:

- Real-time Models (3-week course, T-219-REMO): Summer 2021.
- Modeling and Verification (T-707-MOVE): Spring 2021.
- Theory of Computation (T-519-STOR): Winter 2021.
- Logic in Computer Science (T-505-ROKF): Spring 2020.

Teaching assistant:

- Theory of Computation (T-519-STOR): Winter 2019 & 2020.
- Real Time Models (3-week course, T-219-REMO): Summer 2019 & 2022.
- Modeling and Verification (SC-T-707-MOVE): Spring 2019 & 2022.
- Logic in Computer Science (T-505-ROKF): Spring 2022.

CoReLab NTUA

Sep 2018 - Feb 2019

Teaching assistant

Athens, Greece

- Introduction to Computer Science: Dep. of Electrical Engineering.
- Discrete Mathematics I: Dep. of Electrical Engineering & Dep. of Applied Mathematics.
- Introduction to programming (C,C++): Dep. Of Electrical Engineering.

OTHER WORK EXPERIENCE

CoReLab NTUA

Athens, Greece

Teaching assistant/Lab member

Sep 2017 - Feb 2019

- Hired for TA of several courses during undergrad studies.
- Co-organized and gave lectures for various elective courses.
- Participated in research activities: <https://arxiv.org/abs/1902.05529>.

Megaventory Inc.

Software Engineer Intern

Athens, Greece

June 2018 - Aug 2018

- Implemented interactive user guides.
- Designed an extension to the database for implementing Landed Cost calculations.
- Performed a risk analysis and a response analysis over user statistics.
- Created automatic gadget for testing compatibility of new features with restricted user app views.

Public education sector

High School Student Tutor

Athens, Greece

Sep 2017 - June 2017

- Provided tutorship for high school students in Mathematics, Statistics and Informatics.

PERSONAL SKILLS

- Languages: **Greek** - Native, **English** - Proficient (long time user in professional and personal environments), **French** - Basic (basic education and occasional low-level use).
- Research Software: Uppaal, Minitab, R, Mathematica, Matlab
- Programming Languages & Skills: Python, C, C++, Java, HTML/CSS, Haskell, SQL, Fortran.
- Miscellaneous: Drivers license, leisure sailboat driving and management ability, percussion instrument proficiency, various music experience in other instruments and skills (guitar, piano, singing, marching band performance), sound technician experience.

NAMES OF REFERENCES

- Luca Aceto, luca@ru.is
- Parosh Abdulla, parosh.abdulla@it.uu.se
- Antonios Achilleos, antonios@ru.is