Curriculum vitae

Elli Anastasiadi

Selma Lagerløfs Vej 300, 9220 Aalborg

Assistant professor at the department of Computer Science,
Aalborg University, Denmark

PERSONAL DETAILS

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h-index: 3   DBLP   ORCID

RESEARCH & EDUCATION

Aalborg University (Ongoing)	**Aalborg, Denmark**
Assistant professor, DEIS group	*1/10/2024 - Today*

Uppsala University	**Uppsala, Sweden**
Postdoc position with the algorithmic program verification group.	*24/10/2022 - 3/10/2024*

Reykjavik University	**Reykjavik, Iceland**
PhD, ICE-TCS, Supervisors: Luca Aceto, Anna Ingólfsdóttir	*22/2/2019 - 10/10/2022*

Thesis title: "Syntactic approaches to negative results in process algebras and modal logics".

NTUA & NKUA	**Athens, Greece**
Masters program "Algorithms, Logic and Mathematics" GPA: 9.0/10.0 .	*Sept 2018 - Feb 2019*

Specializations: Logic in computer science.

National Technical University of Athens (NTUA)	**Athens, Greece**
5-year diploma (MSc) in Applied Mathematics GPA: 7.9/10.0 .	*Sep 2013 - Sep 2018*

Specializations: Applied statistics, Mathematics of Computer Science.
Thesis title: "Parameterized complexity and model checking on bounded families of graphs" (grade: 10/10).

PUBLICATIONS

JOURNAL PUBLICATIONS

- Complexity results for modal logic with recursion via translations and tableaux. Aug 2024. [DOI] [PDF]
  With Luca Aceto, Antonis Achilleos, Adrian Francalanza, and Anna Ingólfsdóttir.
  In: **Logical Methods in Computer Science**
- 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 Ingólfsdóttir.
  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 Ingólfsdóttir, and Bas Luttik, Mathias Ruggaard Pedersen
  In: **Theoretical Computer Science**.

CONFERENCE PUBLICATIONS

- Centralized vs Decentralized Monitors for Hyperproperties. Sep 2024. [DOI] [PDF]
  With Luca Aceto, Antonis Achilleos, Adrian Francalanza, Daniele Gorla, and Jana Wagemaker.
  In **CONCUR**.
- On probablilistic Monitorability. December 2022. [DOI] [PDF]
  With Luca Aceto, Antonis Achilleos, Adrian Francalanza, Anna Ingólfsdóttir, 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 Ingólfsdóttir.
  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 Ingólfsdóttir.
  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: Axiomatising parallel composition in process algebras. July 2021. (Invited paper) [DOI] [PDF]
  With Luca Aceto, Valentina Castiglioni, Anna Ingólfsdóttir, 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 Ingólfsdóttir, and Mathias Ruggaard Pedersen:
  In: **20th Italian Conference on Theoretical Computer Science**.

UNDER REVIEW
- Consistency Checking against the Release-Acquire Semantics [PDF]
  With Parosh Abdulla and Samuel Grahn.

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 Ingolfsdottir.
- NWPT 2023 - Infinite hard families of equations in process algebras. With Luca Aceto.
- RADICAL 2023 - Communicating Monitors for Hyper-μHML. 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 Ingolfsdottir Online proceedings.
- PLS 2019 - An Axiomatization of Verdict Equivalence over (Closed) Regular Monitors. With Luca Aceto and Anna Ingolfsdottir.

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, EXPRESS/SOS 2024, ICTAC 2024

COMMITTEES

EXPRESS/SOS 2024   **Sep 2024**
Calgary, Canada
Program committee

Panhellenic Logic Symposium   **July 2024**
Thessaloniki, Greece
Scientific & program committee

LMW@CSL   **Feb 2024**
Naples, Italy
Organising committee

Essays Dedicated to Frits W. Vaandrager on the Occasion of His 60th Birthday   **Sep 2022**
Online
Program committee

Logic Colloquium 2022   **June 2022**
Reykjavik, Iceland
Local organiser

The New York Colloquium on Algorithms and Complexity   **Dec 2021**
New York, USA (online)
Organising committee

32nd Nordic Workshop on Programming Theory   **Nov 2021**
Reykjavik, Iceland
Local organiser

MISC

Postdoc Representative   **March 2024 (Ongoing)**
Division of Computer Systems, Uppsala Univeristy

SIGLOG monthly newsletter   **Jan 2024 (Ongoing)**
Coordinator

IT-DoCS Seminars   **Nov 2023 (Ongoing)**
Organiser & Chair

Member of the new head of IT-DoCS committee   **Apr 2023**
Postdoc representative

TALKS

Trends in Concurrency Theory   **9/9/20243**
Calgary, Canada
○ Talk title: "Hyperproperties".

Open Problems in Concurrency Theory   **27/06/2023**
Bertinoro, Italy
○ " Verification of weak memory models".

Formal Methods seminar   **8/06/2023**
Marseille, France
○ " Verification of weak memory models".

Formal Methods seminar   **23/06/2022**
Gothenburg, Sweden (online)

○ "Monitoring Hyperproperties with Circuits: Foundation and Extensions".

Division of Computer Systems seminar   1/6/2022
Uppsala, Sweden (online)
○ "Monitoring hyperproperties with circuits".

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".

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*
○ 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   *Reykavik, 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.   **Athens, Greece**
Software Engineer Intern   *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   **Athens, Greece**
High School Student Tutor   *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