

Curriculum vitae

# Elli Anastasiadi

Lägerhyddsvägen 1, 752 37 Uppsala

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

## PERSONAL DETAILS

✉ anastasiadi.elli0@gmail.com     l0e42.github.io     +354-774 7702

## RESEARCH & EDUCATION

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

## PUBLICATIONS

### JOURNAL PUBLICATIONS

- 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: Axiomatising 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.....

- Consistency Checking against the Release-Acquire Semantics With Parosh Abdulla and Samuel Grah. More details omitted due to double-blind review process.
- Complexity results for modal logic with recursion via translations and tableaux [PDF]  
With Luca Aceto, Antonis Achilleos, Adrian Francalanza, and Anna Ingólfssdóttir.

## 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.....

- NWPT 2023 - Infinite hard families of equations in process algebras. With Luca Aceto.
- RADICAL 2023 - Communicating Monitors for Hyper- $\mu$ 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

- Reykjavik University Research Fund for the project "REVoCoP: Runtime and Equational Verification of Concurrent Processes". Feb 2022.
- 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".*

### COMMITTEES.....

**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

<b>Logic Colloquium 2022</b> <i>Reykjavik, Iceland</i> Local organiser	June 2022
<b>The New York Colloquium on Algorithms and Complexity</b> <i>New York, USA (online)</i> Organising committee	Dec 2021
<b>32nd Nordic Workshop on Programming Theory</b> <i>Reykjavik, Iceland</i> Local organiser	Nov 2021
<b>MISC</b> .....	
<b>SIGLOG monthly newsletter</b> <i>Coordinator</i>	Jan 2024 (Ongoing)
<b>IT-DoCS Seminars</b> <i>Organiser &amp; Chair</i>	Nov 2023 (Ongoing)
<b>Member of the new head of IT-DoCS committee</b> <i>Postdoc representative</i>	Apr 2023
<b>TALKS</b> .....	
<b>Nordic Workshop of Programming Theory</b> <i>Västerås, Sweden</i>	22/11/2013
○ Talk title: "Infinite hard families of equations in process algebras".	
<b>Athens Coloquium of Algorithms and Complexity</b> <i>Athens, Greece</i>	26/08/2023
○ "Data structures for the verification of weak memory models".	
<b>Open Problems in Concurrency Theory</b> <i>Bertinoro, Italy</i>	27/06/2023
○ "Verification of weak memory models".	
<b>Formal Methods seminar</b> <i>Marseille, France</i>	8/06/2023
○ "Verification of weak memory models".	
<b>Formal Methods seminar</b> <i>Gothenburg, Sweden (online)</i>	23/06/2022
○ "Monitoring Hyperproperties with Circuits: Foundation and Extensions".	
<b>Division of Computer Systems seminar</b> <i>Uppsala, Sweden (online)</i>	1/6/2022
○ "Monitoring hyperproperties with circuits".	
<b>Henzinger group seminar</b> <i>Institute of science and technology, Austria (online)</i>	10/5/2022
○ "Monitoring hyperproperties with circuits".	
<b>ALMA Masters program seminar</b> <i>Athens, Greece</i>	June 2021
○ "Natural Deduction: From classic to modal logic".	
<b>CoReLab Seminar</b> <i>Athens, Greece</i>	June 2020
○ "The Uppaal model checker".	
<b>Reykjavik University Computer Science Flash Talks</b> <i>Reykjavik, Iceland</i>	Feb 2020
○ "Using equational logic towards formal verification of concurrent systems".	
<b>Nordic Workshop of Programming Theory</b> <i>Tallinn, Estonia</i>	Nov 2019
○ Talk title: "Axiomatizing equivalences over regular monitors".	
<b>Panhelleninc Logic Symposium</b>	June 2019

Anogeia, Greece

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

### ICE-TCS Theory Day

Reykjavik, Iceland

- "Fine-grained complexity".

### ICE-TCS Seminar

Reykjavik, Iceland

- "Parameter trade-offs for the Model Checking Problem".

April 2019

March 2019

## TEACHING RECORD

---

### Uppsala University, Division of Computer Systems

Instructor

Oct 2022 - present

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

Department of Computer Science

March 2019 - Oct 2022

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

Teaching assistant

Sep 2018 - Feb 2019

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

Teaching assistant/Lab member

Athens, Greece

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.