Cezar-Constantin Andrici

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1 Education

PhD in Computer Science at MPI-SP, Germany (Oct 2021)
Supervisor: Cătălin Hriţcu, Subject: Secure Interoperability

M.Sc. in Computer Science from FII @ UAIC Iași, Romania (Oct 2019 to Jul 2021)

M.Sc. in Regional Development from CSE @ UAIC Iași, Romania (Oct '19 to Jul '21)

Licence in Computer Science from UAIC, Iași, Romania (Oct 2015 to Jul 2019)

High School Diploma from „Grigore Moisil" Computer Science High School, Iași
Participant in the National Computer Science Olympiad in Romania in 2008, 2009, 2011 and 2012. Ranked top 15 every year. Also, participated at the National Computer Science Olympiad from Bulgaria in 2009.

2 Positions

Research intern (from Feb 2020 to Jun and from Nov to Jul 2021)
- ➢ under the supervision of Ștefan Ciobâcă
- ➢ on secure F*-ML interoperability for input-output programs
- ➢ at UAIC, Iași, Romania

Research intern (Jul 2020 to Oct 2020)
- ➢ under the supervision of Cătălin Hriţcu
- ➢ on secure F*-ML interoperability for input-output programs
- ➢ at MPI-SP, Bochum, Germany

Research intern (Jul 2019 to Nov 2019)
- ➢ under the supervision of Cătălin Hriţcu and Exequiel Rivas
- ➢ case study on using the F* language to verify trace properties of a web server
- ➢ at Inria Paris, France

IT Specialist (Dec 2017 to Jun 2019)
- ➢ at UAIC, Iași, Romania

Full Stack Developer and Team Leader (Sep 2013 to Jun 2018)
- ➢ participated at hub:raum - Tech Incubator of Deutsche Telekom
- ➢ at CTF365 (security startup), Cluj, Romania

Software Development Intern (Jul 2015 to Oct 2015)
- ➢ at Amazon Development Center, Iași, Romania

3 Awards & Grants

1st prize at Student Research Competition, graduates section, at the 25th ACM SIGPLAN International Conference on Functional Programming (ICFP 2020) with submission: Gradual Enforcement of IO Trace Properties.

Travel grant to participate in VMCAI Winter School, New Orleans, 2020.

Scientific performance scholarship from UAIC, Iași, Romania. The scholarship is for 12 months and it is competitively awarded.

4 Publications

1. Poster, extended abstract - **Gradual Enforcement of IO Trace Properties**. Cezar-Constantin Andrici. At the 25th ACM SIGPLAN International Conference on Functional Programming (ICFP 2020). Advisors: Ștefan Ciobâcă, Cătălin Hrițcu, Guido Martínez, Exequiel Rivas, Éric Tanter.

2. **Who Verifies the Verifiers? A Computer-Checked Implementation of the DPLL Algorithm in Dafny.** Cezar-Constantin Andrici and Ștefan Ciobâcă. (submitted for journal review)

3. **Verifying the DPLL Algorithm in Dafny.** Cezar-Constantin Andrici and Ștefan Ciobâcă. In *Working Formal Methods Symposium 2019* (FROM 2019) EPTCS 303, 2019, pages 3–15.

5 Presentations

Gradual Enforcement of IO Trace Properties

- at Student Research Competition, 25th ACM SIGPLAN International Conference on Functional Programming (ICFP 2020), online (Aug 2020).

Verification of IO behavior of programs in F*

- at Faculty of Computer Science Seminar, Iași (Jan 2020).

6 Community Service

Sub-reviewer at

- 42nd IEEE Symposium on Security and Privacy

Student Volunteer at

- 41st ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI 2020);
- 47th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2020);
- European Joint Conferences on Theory and Practice of Software (ETAPS 2019);
- Working Formal Methods Symposium (FROM 2018).

Judge in the national committee for the National Contest InfoEducație for pupils between 2016 and 2020, Romania. (pupils develop and present web or mobile apps)

7 Teaching Assistant

Informally helped tutor students in **Logics in Computer Science**, 2020, UAIC, Iași.

8 Attended Summer Schools

The Cornell, Maryland, Max Planck Pre-doctoral Research School 2020 (online)

Verification, Model Checking, and Abstract Interpretation (VMCAI) Winter School 2020 (New Orleans)

POPL Programming Languages Mentoring Workshop 2020 (New Orleans)

ETAPS Mentoring Workshop 2019 (Prague)

ICUB - Coq Autumn School (Bucharest, 2018)

9 Skills

Strong algorithmic and problem solving background. A knack and love for problem solving and theoretical challenges. Ability to quickly research and learn new concepts. Can work efficiently in a team.

Knowledgeable with VIM, Emacs, Linux based platforms, code versioning tools, Docker and Cloud Services.

Proficient in F*, Dafny, JavaScript, C/C++ and SQL. Knowledgeable with Solidity, Haskell, Python, Coq, Ruby and Java.

10 Languages

Romanian (Native), **English** (Proficient user, IELTS - Overall 7.5), **German** (beginner)

11 References

Ștefan Ciobâcă   Associate Professor at UAIC, Iași, Romania
➤ stefan.ciobaca@gmail.com

Cătălin Hrițcu   Tenured faculty at MPI-SP, Bochum, Germany
➤ catalin.hritcu@gmail.com

Éric Tanter   Full Professor at University of Chile
➤ etanter@dcc.uchile.cl