NataliiaStulova

contact

nata.stulova@pm.me

links

web:// **s0nata.github.io**
LinkedIn:// **nata-stulova**

programming

Prolog
C++, Java
LaTeX
bash

languages

native
Ukrainian
Russian
proficient
English
Spanish
German
beginner
French
Hebrew

interests

> software engineering

> natural language processing

> requirements engineering

> knowledge representation and reasoning

> program specification languages

experience

2020 – now **Software Composition Group** | *Postdoc*
University of Bern Bern, Switzerland
My main research focus is software documentation quality and developing tools for improving it automatically. I am also working on techniques for supporting requirement engineering tasks in software development.

2019 – 2020 **Lab for Automated Reasoning and Analysis**| *Postdoc*
Swiss Federal Institute of Technology in Lausanne (EPFL) Lausanne, Switzerland
I have worked on formal languages-based techniques for source code automatic documentation and summarization.

2014 – 2018 **IMDEA Software Institute** | *Research Assistant* Madrid, Spain
My research focus has been specification-based software verification: how to write specifications of program behavior, how to introduce non-trivial properties of programs, how to check them thoroughly, and how to do this efficiently.

2012 – 2013 **Intelligent Systems and Knowledge Engineering Group** | *Research Intern*
Technical University of Madrid (UPM) Madrid, Spain
I have been designing and implementing a graphical user interface (GUI) for a multi-agent airspace simulation system.

education

2014–2018 **PhD** in Software, Systems and Computing cum laude — Technical University of Madrid (UPM)

2012–2013 **MSc** in Artificial Intelligence — Technical University of Madrid (UPM)

2008–2012 **BSc** in System Analysis — National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU "KPI")

research

SCAM'20 Towards Detecting Inconsistent Comments in Java Source Code Automatically
N. Stulova, A. Blasi, A. Gorla
20th IEEE International Working Conference on Source Code Analysis and Manipulation
documentation • natural language processing • software quality

PPDP'18 Static Performance Guarantees for Programs with Run-time Checks
M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M. Hermenegildo
20th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming
resource usage analysis • assertions • declarative programming • run-time checking

PADL'18 Exploiting Term Hiding to Reduce Run-time Checking Overhead
N. Stulova, J. F. Morales, M. Hermenegildo
20th International Symposium on Practical Aspects of Declarative Languages
declarative programming • module systems • assertions • abstract interpretation • run-time checking

SCP'17 Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis
N. Stulova, J. F. Morales, M. Hermenegildo
Science of Computer Programming, 18th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'16) Special Issue
abstract interpretation • assertions • run-time checking • logic programming • horn clauses

ICLP'15 Practical Run-time Checking via Unobtrusive Property Caching
N. Stulova, J. F. Morales, M. Hermenegildo
Theory and Practice of Logic Programming, 31st International Conference on Logic Programming Special Issue
assertions • property caching • memoization • run-time checking

PPDP'14 Assertion-based Debugging of Higher-Order (C)LP Programs
N. Stulova, J. F. Morales, M. Hermenegildo
16th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming
higher-order • assertions • run-time checking • declarative programming

other qualifications

2020 **Lecturer** online and presencial teaching
Taught a pert of the Software Skills Lab, a 5 ECTS course of the Joint Master in Computer Science program of the BeNeFri universities.

2017 **Workshop Chair | Organizer** web presence • talk scheduling • submission review
Co-organized CICLOPS'17 – 15th International Colloquium on Implementation of Constraint and LOgic Programming Systems, co-located with ICLP'17 / CP'17 / SAT'17.