

NataliiaStulova

contact

nata.stulova@pm.me

links

web:// s0nata.github.io

LinkedIn:// [nata-stulova](#)

education

PhD in Software, Systems and Computing cum laude

2014–2018

Technical University of Madrid (UPM)

MSc in Artificial Intelligence

2012–2013

Technical University of Madrid (UPM)

BSc in Systems Analysis

2008–2012

National Technical University of Ukraine "Kyiv Polytechnic Institute" (NTUU "KPI")

development

Java, C++

Prolog

♥ bash, git

GitLab, Phabricator

Trello

LaTeX

Wordpress

languages

native

Ukrainian

Russian

proficient

English

Spanish

intermediate

German

beginner

French

Hebrew

summary

I am a computer scientist focusing on software documentation tools and techniques. I work with: formal specifications • code comments • requirement documents

experience

2020–now

Senior Researcher [University of Bern]

Switzerland

I currently lead several research projects on software documentation quality analysis and developing tools for improving it automatically. I also collaborate in a project on tool support for requirement engineering tasks in software development.

2019–2020

Scientist [Swiss Federal Institute of Technology in Lausanne (EPFL)]

Switzerland

I have worked on formal languages-based techniques for source code automatic documentation and summarization, exploring the potential of approaches based on natural language processing (NLP) to software documentation analysis.

2014–2018

Research Assistant [IMDEA Software Institute]

Spain

I have worked on program specification languages and tools for specification-based software verification: how to write formal specifications of program behavior properties, how to check them at run time, and how to do this efficiently.

2012–2013

Research Intern [Technical University of Madrid (UPM)]

Spain

I have designed and developed the initial graphical user interface (GUI) for a multi-agent airspace simulation system, prepared demos and documentaiton.

research

> comments and requirements

LowCode'21 Interactive Behavior-driven Development: a Low-code Perspective

SCAM'21 Do Comments follow Commenting Conventions? A Case Study in Java and Python

JSS'21 RepliComment: Identifying Clones in Code Comments

SCAM'20 Towards Detecting Inconsistent Comments in Java Source Code Automatically

> formal specifications

PPDP'18 Static Performance Guarantees for Programs with Run-time Checks

PADL'18 Exploiting Term Hiding to Reduce Run-time Checking Overhead

SCP'17 Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis

ICLP'15 Practical Run-time Checking via Unobtrusive Property Caching

PPDP'14 Assertion-based Debugging of Higher-Order (C)LP Programs

other qualifications

2020–2021

Lecturer

online and in-person teaching • lecture video recording • course design

Teaching the Java Crash Course and Algorithms and Data Structures parts of the Software Skills Lab, a 5 ECTS course of the Joint Master in Computer Science program of the BeNeFri universities.

2020–now

Development Volunteer | Webmaster

requirements gathering • no-code web development

Consulting remotely a Dnipro-based cultural space KsiProstir on website development and maintenance.

2017

Workshop Chair | Organizer | Webmaster

web presence • talk scheduling • submission review

Co-organized the 15th International Colloquium on Implementation of Constraint and Logic Programming Systems CICLOPS'17.