OLGA GADYATSKAYA

6, avenue de la Fonte, Esch-Belval, Luxembourg, L-4364

+352-4666-44-5506 • olga.gadyatskaya@uni.lu • http://satoss.uni.lu/members/olga/

EXPERIENCE

SnT, University of Luxembourg   *July 2014 - Present*
Research Associate   Esch-Belval, Luxembourg

· Research project PI and manager.
· Research in Android security: scalable identification of repackaged and malicious applications; app code testing and analysis.
· Research in security risk management with attack trees.
· Writing project proposals (Horizon 2020, various Luxembourg National Research Fund schemes).
· Teaching for Master and Bachelor courses.
· Supervising a postdoc, a PhD student and scientific developers; supervising Master and Bachelor students.
· Representing the University of Luxembourg as a partner in the EU research project TREsPASS.

University of Trento   *April 2009 - June 2014*
Postdoctoral Researcher   Trento, Italy

· Research in Java Card and Android security.
· Representation of the University of Trento as a partner in the EU FP7 projects SecureChange, SecCord (acting WP leader in SecCord), CAPITAL, CYSPA.
· Contribution to H2020 proposals.
· Co-supervision of students; supervision of a scientific developer.
· Teaching assistant for the courses: Computational Complexity (MSc) and Computer Security (MSc, only lectures on mobile security).

Inst. of Comp. Mathematics and Math. Geophysics   *October 2008 - April 2009*
Junior Researcher   Novosibirsk, Russia

· Research, development and empirical evaluation of random graph connectivity metrics.

Novosibirsk State University   *Fall semesters 2005 - 2008*
Lecturer   Novosibirsk, Russia

· Lectures and practical exercises for Bachelor courses.

EDUCATION

Novosibirsk State University   *November 2008*
PhD in Mathematics   Novosibirsk, Russia
Thesis title: *Analysis of the expectation of the disconnected vertex pairs number in random graphs and its applications in optimal network structure selection*

Novosibirsk State University   *June 2005*
Specialist degree in Mathematics   Novosibirsk, Russia
5 years program

PROJECT ACQUISITION AND MANAGEMENT

COMMA *April 2016 - June 2019*

Fonds National de la Recherche (FNR) Luxembourg

· I am the proposer and the principal investigator in this project funded under the FNR Junior CORE scheme.
· Contribution from the FNR 690,000 euro.

DroidMod *November 2016 - November 2020*

FNR Luxembourg

· I am a co-proposer and the main author of this Aides a la Formation-Recherche (AFR) project that funds a PhD candidate.
· Contribution from the FNR 170,000 euro.

SPSquared *January 2017 - June 2023*

FNR Luxembourg

· I am the acting project manager for this FNR PRIDE project that funds 14 PhD positions.
· I have co-authored the proposal (2,000,000 euro contribution from the FNR).

I have participated in several research projects: 5 EU projects and 4 FNR projects.
I have co-authored 4 H2020 proposals, 4 FNR bilateral proposals with EU countries, 2 FNR-CORE proposals, 1 FNR-PRIDE proposal, 1 FNR-AFR-Individual proposal.

TEACHING EXPERIENCE

Lecturer and TA *Spring semesters 2015–2019*
Information Security Management Professional MSc, University of Luxembourg

· Giving lectures on web security and attack trees; preparing and grading homework exercises.

Guest lecturer *Spring semesters 2017–2019*
Principles of Security Engineering MSc level, University of Luxembourg

· Giving lectures on Android security and attack trees.

Lecturer and TA *Fall semesters 2014–2018*
Introduction to IT Security BSc level, University of Luxembourg

· Giving lectures on various topics (security evaluation and administration, Android security, web security, cryptography, attack trees).
· Preparing and grading homework exercises.

Lecturer and TA *Fall semesters 2010–2013*
Computational Complexity MSc level, University of Trento

· Giving lectures on selected topics; preparing and grading homework exercises.

Guest lecturer *Spring semesters 2012–2013*
Computer Security MSc level, University of Trento

· Giving lectures on mobile security.

Lecturer *October 2005 – December 2008*
Computer Literacy BSc level, Novosibirsk State University

· Giving lectures and supervising practical exercises on computer basics.

SUPERVISION OF STUDENTS

Currently, I am supervising:

1 PhD candidate in Computer Science; thesis defense expected by November 2020.

1 Master student in Computer Science; thesis defense expected in April 2019.

3 Master students in Information Systems Security Management (continuing education programme); thesis defenses expected in June 2019.

Previously, I have supervised:

2 Master students in Computer Science; defenses in September 2016 and June 2018.

1 Master student in Information Systems Security Management; thesis defense in June 2016.

2 Bachelor students in Computer Science; defenses in June 2016 and June 2017.

PUBLICATIONS

S. Dashevskyi, O. Gadyatskaya, A. Pilgun and Y. Zhauniarovich *The influence of code coverage metrics on automated testing efficiency in Android* in Proc. of ACM CCS Poster Session (2018).

A. Pilgun, O. Gadyatskaya, S. Dashevskyi, Y. Zhauniarovich and A. Kushniarou *An effective Android code coverage tool* in Proc. of ACM CCS Poster Session (2018).

O. Gadyatskaya, R. Jhawar, S. Mauw, R. Trujillo-Rasua and T. Willemse *Refinement-aware generation of attack trees* in Proc. of STM (2017).

O. Gadyatskaya and R. Trujillo-Rasua *New directions in attack tree research: Catching up with industrial needs* in Proc. of GraMSec (2017).

O. Gadyatskaya, A.-L. Lezza and Y. Zhauniarovich *Evaluation of resource-based app repackaging detection in Android* in Proc. of NordSec (2016).

Y. Zhauniarovich and O. Gadyatskaya *Small changes, big changes: An updated view on the Android permission system* in Proc. of RAID (2016).

M. Ford, M. Fraile, O. Gadyatskaya, R. Kumar, M. Stoellinga and R. Trujillo-Rasua *Using attack-defense trees to analyze threats and countermeasures in an ATM: A case study* in Proc. of PoEM (2016).

O. Gadyatskaya, C. Harpes, S. Mauw, C. Muller and S. Muller *Bridging two worlds: Reconciling practical risk assessment methodologies with theory of attack trees* in Proc. of GraMSec (2016).

O. Gadyatskaya, K. Labunets and F. Paci *Towards empirical evaluation of automated risk assessment methods* in Proc. of CRiSIS (2016).

O. Gadyatskaya, R. Jhawar, P. Kordy, K. Lounis, S. Mauw and R. Trujillo-Rasua *Attack trees for practical security assessment: Ranking of attack scenarios with ADTool 2.0* in Proc. of QEST (2016)

O. Gadyatskaya, R.R. Hansen, K.G. Larsen, A. Legay, M.C. Olesen and D.B. Poulsen *Modelling Attack-defense Trees Using Timed Automata* in Proc. of FORMATS (2016).

Y. Zhauniarovich, M. Ahmad, O. Gadyatskaya, B. Crispo and F. Massacci *StaDynA: Addressing the problem of dynamic code updates in the security analysis of Android applications* in Proc. of ACM CODASPY (2015).

O. Gadyatskaya *How to generate security cameras: Towards defence generation for socio-technical systems* in Proc. of GraMSec (2015).

Y. Zhauniarovich, A. Philippov, O. Gadyatskaya, B. Crispo and F. Massacci *Towards black-box testing of Android apps* in Proc. of Software Assurance Workshop at ARES (2015).

O. Gadyatskaya, F. Massacci and Y. Zhauniarovich *Security in the Firefox OS and Tizen mobile platforms* in IEEE Computer (2014).

Y. Zhauniarovich, O. Gadyatskaya, B. Crispo, F. La Spina and E. Moser *FSquaDRA: Fast detection of repackaged applications* in Proc. of DBSec (2014).

M. de Gramatica, F. Massacci and O. Gadyatskaya *An empirical study of the technology transfer potential of EU security and trust R&D projects* in Proc. of Cyber Security and Privacy Forum (2014).

Y. Zhauniarovich, O. Gadyatskaya and B. Crispo *Enabling trusted stores for Android* in Proc. of ACM CCS Demo Session (2013).

O. Gadyatskaya, F. Massacci, Q.-H. Nguyen and B. Chetali *Load time code validation for mobile phone Java Cards* in Journal of Information Security Applications (2013)

M. Ngo, F. Massacci and O. Gadyatskaya *Map-Reduce enforcement framework of information flow policies* in Proc. of FCS Workshop (2013).

O. Gadyatskaya, F. Massacci and A. Philippov *Security-by-Contract for the OSGi platform* in Proc. of IFIP SEC (2012).

N. Dragoni, O. Gadyatskaya, F. Massacci and A. Philippov *High-level algorithms and data structures requirements for Security-by-Contract on Java Cards* in Int. Journal of Critical Computer-Based Systems (2012).

O. Gadyatskaya and F. Massacci *Controlling applications interactions on the novel smart cards with Security-by-Contract* in Proc. of ISFMCO (2012).

O. Gadyatskaya, E. Lostal and F. Massacci *Load time security verification* in Proc. of ICISS (2011).

N. Dragoni, E. Lostal, O. Gadyatskaya, F. Massacci and F. Paci *A load time policy checker for open multi-application smart cards* in Proc. of POLICY (2011).

F. Massacci, F. Paci and O. Gadyatskaya *Dynamic resiliency to changes* in Proc. of Trustworthy Internet Workshop (2011).

O. Gadyatskaya, F. Massacci, F. Paci and S. Stankevich *Java Card architecture for autonomous yet secure evolution of smart cards* in Proc. of NordSec (2010).

N. Dragoni, O. Gadyatskaya and F. Massacci *Can we support applications' evolution in multi-application smart cards by Security-by-Contract?* in Proc. of WISTP (2010).

N. Dragoni, O. Gadyatskaya and F. Massacci *Security-by-Contract for applications evolution in multi-application smart cards* in Proc. of NODES (2010).

O. Gadyatskaya, A. Rodionov and O. Rodionova *Using EDP-polynomials for network structure optimization* in Proc. of ICCSA (2008).

ADDITIONAL TRAINING AND COURSES

Inclusive research supervision
University of Luxembourg   *January 2019*

· Training for supervisors on inclusion and diversity in post-graduate research supervision.

Introduction to good scientific practice
University of Luxembourg   *October 2018*

· Training for postdoctoral researchers on research ethics, integrity and dealing with scientific misconduct.

Fire-fighting training
University of Luxembourg   *March 2018*

· Training on basics of fire-fighting.

First aid training
University of Luxembourg   *November 2017*

· Training on first aid techniques.

Scientific writing for postdocs and PIs
University of Luxembourg   *June 2017*

· Training on composing academic texts in English.

Writing effective Proof-of-Concept applications
University of Luxembourg   *September 2016*

· Training offered by Technology Transfer Office on the guidelines for Proof-of-Concept project proposals and the basics of research commercialisation strategies.

Supervision of PhD candidates
University of Luxembourg   *July 2016*

· Training on supervision of doctoral students.

Career development
University of Luxembourg   *May 2016*

· Training on career development for researchers.

Intellectual property, R&D and knowledge transfer
University of Luxembourg   *April 2016*

· Training on intellectual property rights management (copyright, patenting, technology transfer).

Leading and planning
University of Luxembourg   *March 2016*

· Training on research management skills for principal investigators and postdocs.

Project management
University of Luxembourg   *June 2015*

· Training on research project management for postdoctoral and doctoral researchers.

Risk management for project proposals
University of Luxembourg   *March 2015*

· Workshop on risk assessment and management in the context of research project proposals.

IP rights in H2020 projects *September 2014*
Luxinnovation

· Workshop on intellectual property rights management in the context of H2020 proposals, projects and post-project results exploitation.

PARTICIPATION IN ACADEMIC DUTIES

PC membership
· The 6th International Workshop on Graphical Models for Security (GraMSec'19).
· The 15th IEEE International Conference on Advanced and Trusted Computing (ATC'18).
· The 2018 International Workshop on Advances in Mobile App Analysis (A-Mobile'18).
· The 5th International Workshop on Graphical Models for Security (GraMSec'18).
· The 14th IEEE International Conference on Advanced and Trusted Computing (ATC'17).
· The 4th International Workshop on Graphical Models for Security (GraMSec'17).
· The 3rd International Workshop on Graphical Models for Security (GraMSec'16).
· The 2nd International Workshop on Graphical Models for Security (GraMSec'15).
· The 4th Cyber Security and Privacy Innovation Forum (CSP Innovation Forum'15).
· The 3rd Cyber Security and Privacy EU Forum (CSP Forum'14).

Journal reviewer
· Transactions on Dependable and Secure Computing (2019, 2017)
· Soft Computing (2019)
· International Journal on Information Security (2019, 2018, 2017, 2016, 2015)
· Computers & Security (2018, 2014)
· Discrete Events Dynamic Systems (2018)
· Transactions on Cloud Computing (2017)
· Security and Communication Networks (2017)
· Transactions on Emerging Telecommunication Technologies (2016)
· IEEE Security and Privacy Magazine (2015)
· IEEE Computer (2014)

LANGUAGES

English	Full professional proficiency
Russian	Native proficiency
Italian	B2.1
French	B1.1
Luxembourgish	B1.1
German	B1.1
Spanish	A1
Chinese	A1.1