

Education

2011–2016 PhD in Computer Science (mathematical sciences), Institute of Computer Science Polish Academy of Sciences, Warsaw, Poland.

> Thesis with distinction: "Cryptographic Protocols for Modern Identification Documents", thesis advisors: prof. Mirosław Kutyłowski and dr Przemysław Kubiak.

2006–2011 Master of Science in Computer Science, Wrocław University of Technology, Wrocław, Poland.

> Thesis: "Two Party Distributed RSA Key Generation - implementation on Java Cards", thesis advisor: dr Przemysław Kubiak.

Professional Experience

- 01.08.2020 Faculty, CISPA-Helmholtz Center for Information Security.
 - currently Responsibilities: research in the areas of cryptography and cybersecurity.
- 01.09.2018 Visiting Assistant Professor, Stanford University.
- 31.07.2020 Responsibilities: research in the areas of cryptography and cybersecurity.
- 01.07.2017 Research Group Leader, CISPA-Helmholtz Center for Information
- 31.07.2020 Security.

Responsibilities: research in the areas of cryptography and cybersecurity.

- 01.10.2016 **Research Assistant**, Wrocław University of Technology.
- 30.06.2017 Responsibilities: teaching graduate and undergraduate students and conducting research.
- 01.10.2015— **Principal investigator**, Wrocław University of Technology.
- 30.09.2016 Project "Blind signatures and electronic identity documents". Responsibilities: project management, design of cryptographic algorithms, implementation on smart cards.
- 11.07.2016 External expert, Polish Ministry of Digital Affairs.
- 31.08.2016 Polish electronic identity document project (PL.ID). Responsibilities: consultation.
- 01.07.2015 **PhD Fellow**, Wrocław University of Technology.
- 30.09.2015 Internship in the Department of Computer Science, topic of internship "Anonymous online auctions using smart cards and auction theory". Responsibilities: design of cryptographic algorithms.
 - 2015 **Investigator**, Wrocław University of Technology. FNP IMPULS project "Biometric Keypress". Responsibilities: implementation of biometric techniques on a STM32F21X microcontroller.

- 01.09.2014 **PhD Fellow**, *IBM Research*, Zurich, Switzerland.
- 30.11.2014 Internship in the research group of dr Jan Camenisch, work on project FutureID EU FP7 318424. Responsibilities: designing a mechanism to backup device-bound anonymous credentials.
- 23.07.2014– **Java Card Programmer**, Research & Engineering Center (REC), 31.08.2014 Wrocław.
 - Short term contract. Responsibilities: programming of Java Cards.
- 01.07.2012— **Principal investigator**, Institute of Computer Science Polish Academy 30.04.2014 of Sciences.
 - Project "Secure and authenticated communication between modern identity documents and a reader". Responsibilities: project management, design of cryptographic algorithms, implementation on smart cards.
- 01.03.2012 Independent analyst, Wrocław University of Technology.
- 30.11.2013 R&D project "Biometric techniques and PKI in modern identity documents and in the protection of information systems". Responsibilities: design of cryptographic algorithms, implementation on smart cards and implementation of a terminal on a raspberry Pi.
- 07.11.2011 **Independent analyst**, Wrocław University of Technology.
- 31.12.2012 R&D project "Detectors and sensors for measuring factors hazardous to environment modeling and monitoring of threats". Responsibilities: design and implementation of a counting system based on GSM technology.
- 01.03.2011 **Technician**, Wrocław University of Technology.
- 30.06.2011 R&D project "Electronic signature for administration purposes". Responsibilities: design of cryptographic procedures.

Fellowships and Awards

- 2016 PhD thesis distinction "Cryptographic Protocols for Modern Identification Documents"
- 2015 PRELUDIUM program Laureate from National Science Center
- 2015 Award of the Dean of the Faculty of Fundamental Problem of Technology, Wrocław University of Technology
- 2014 IBM Great Minds Award
- 2014 Award of the Rector of Wrocław University of Technology
- 2014 Scholarship for best PhD students at Wrocław University of Technology
- 2013 Scholarship for best PhD students at Wrocław University of Technology
- 2012 VENTURES program Laureate from Foundation for Polish Science
- 2012 Scholarship given by the Foundation for Polish Science

Selected Publications

- CCS'19 "Membership Privacy for Fully Dynamic Group Signatures"
- USENIX "simTPM: User-centric TPM for Mobile Devices"
- Security'19
- Eurocrypt'19 "Ring Signatures: Logarithmic Size, No Setup from Standard Assumptions"

PKC'19 "Efficient Non-Interactive Zero-Knowledge Proofs in Cross-Domains without Trusted Setup"

Asiacrypt'18 "Signatures with Flexible Public Key: Introducing Equivalence Classes for Public Keys."

APKC'17 "Two-Move and Setup-Free Blind Signatures with Perfect Blindness"

FC'16 "Blind Signatures from Knowledge Assumptions"

Academic Service

PC Member SOFSEM 2021, IFIP SEC 2020, IFIP SEC 2018, SECPID 2017, Inscrypt 2017.

External Crypto 2019, CCS 2018, S&P 2017, Euro S&P 2017, ASIA CCS 2016,

Reviewing ESORICS 2014, ESORICS 2013.

Journals Fundamenta Informaticae, International Journal of Information Security.

Languages

Polish Native

English Advanced

German Advanced