

Navid Abapour

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Education

Ph.D. in Computer Science

University of Surrey [†]

Supervisors: *Catalin Dragan, Ioana Boureanu*

September 2023 - 2027 (Expected)

Thesis: *Cryptographic approach to ensuring trust in Vehicle-to-everything (V2X) communication*

Honours B.Sc. in Computer Science

University of Mohaghegh Ardabili [‡]

GPA: *3.5/4 - 17.2/20*, Supervisor: *M. Reza Hooshmandasl*

September 2018 - April 2022

Undergraduate Project: *Decentralized lattice-based method for visual symmetric cryptography*

Research Interest

Post-quantum Cryptography, Secure Multi-party Computation, Information-theoretic Privacy

Professional Activities

Reviewer

MDPI Sensors, Springer Arabian Journal for Science and Engineering, Springer Cluster Computing, Springer SN Computer Science

Member

Association for Computing Machinery: Logic and Computation Group

IEEE: Information Theory Society

Computability in Europe: Transfinite Computation Group

Publications

- Abapour, N., & Ebadpour, M. (2023). PiouCrypt: Decentralized lattice-based method for visual symmetric cryptography. Franklin Open, 100018.
- Soleymani, M., Abapour, N., Taghizadeh, E., Siadat, S., & Karkehabadi, R. (2021). Fuzzy Rule-Based Trust Management Model for the Security of Cloud Computing. Mathematical Problems in Engineering, 2021, 1–14.
- Abapour, N., Ghane, P., Shafiesabet, A., & Mahboub, R. (2021). A Novel Security Based Routing Method Using Ant Colony Optimization Algorithms and RPL Protocol in the IoT Networks. Mapta Journal of Electrical and Computer Engineering (MJECE), 3(1), 1–9.

Research Experience

Surrey Centre for Cyber Security

September 2023 - Present

Research Assistant

Director: *Steve Schneider*

- Project: Leakage Resilient and Threshold Changeable Secret Sharing Scheme based on Ring-LWE

University of Melbourne[§]

September 2021 – May 2022

Research Intern

Supervisor: *Toby Murray*, Advisor: *M. Mehdi Ahmadpanah*

- Developed the Advanced Information Flow Security Concurrent Separation Logic [[Prototype](#)] [[Source Code](#)]

Barnamenevisan Company

January 2021 - January 2022

Research and Development Consultant

CEO: *Iman Madaeny* (Microsoft Certified Solutions Associate)

- Provided solutions based on Full-stack Development for web applications and software architectures' issues

[†]TIMES 2023: #43 in Global Young University Ranking | US News 2023: #123 in Computer Science in the World

[‡]TIMES 2023: #201 in the Global Young University Ranking

[§]QS 2023: #14 in the World

University of Mohaghegh Ardabili
Research Assistant

August 2020 – September 2021
Principal Investigator: Shahram Jamali

- Project 1 Report → [\[Paper\]](#) [\[Cert.\]](#)
- Project 2 Report → [\[Video\]](#) [\[Slides\]](#)

Honors & Awards

- Awarded Surrey's Fully-funded Ph.D. Studentship scholarship, Royal Thai scholarship for Asian Institute of Technology*, Stipendium Hungaricum scholarship for Eötvös Loránd University[†], and granted Exceptional Talent award for Amirkabir University of Technology[‡].
- Nominated for the Young Researcher Award at the International Research Awards on Cybersecurity and Cryptography 2023.
- The creativity of the research project for the undergraduate degree selected as the Invited Project by Elsevier to present in the Journal of Software Impacts.
- Received funding grant from the Ministry of Science, Research and Technology and University of Mohaghegh Ardabili, and appreciated for directing the First Computer Science Student Audio Journal in Iran ([RAMACS](#)).
- Announced as Distinguished Student, awarded a scholarship (Tuition Waiver) from Faculty of Sciences, and ranked 2nd among 44 students in B.Sc. Computer Science program by achieving full score (4/4) in more than 80% of courses of Bachelor's degree.

Skills

Programming Languages	C/C++, Python, JavaScript, C#, Shell Script
Software	MATLAB, Maple, Isabelle/HOL, L ^A T _E X, Git, Adobe After Effects
Full-stack Development	Node.js, React Native, React.js, FlexBox, MongoDB
BlackArch	RsaCtfTool, Cryptool, Hydra, Metasploit, VeraCrypt, OpenSSH, Steghide, Stunnel, Hashcat, John the Ripper, Libgcrypt
Languages	Persian (Proficient), Azerbaijani (Native), Turkish (Intermediate), Arabic (Beginner), Spanish (Beginner)

Teaching Experience

Head Teaching Assistant September 2020 - April 2022
University of Mohaghegh Ardabili Lecturers in Charge: M.R. Hooshmandasl¹, Naser Zamani²
Foundations of Algebra², Data Mining¹, Data Structure and Algorithm¹

Lead Instructor April 2018 – December 2021
TopLearn Taught to more than 14450 online students along with 4.5/5 overall rating

- My *Foundations of Information Security* course selected as one of the top ranked courses [\[Slides\]](#) [\[Profile\]](#)

References

- Constantin Cătălin Drăgan**, Associate Professor
Department of Computer Science, University of Surrey | c.dragan@surrey.ac.uk
- Mohammad Reza Hooshmandasl**, Professor
Department of Statistics and Computer Science, University of Mohaghegh Ardabili | mhooshmandasl@uma.ac.ir
- Abdollah Borhanifar**, Professor (Dean of Faculty of Science)
Department of Applied Mathematics, University of Mohaghegh Ardabili | borhani@uma.ac.ir

*QS 2023 Ranking: #201 in the World by Subjects

[†]USNews 2023 and Wikipedia: 5 Nobel Prize Laureates and #1 in Hungary

[‡]USNews 2023: #60 in Mathematics in the World and #2 in Iran