ANISA HALIMI

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2101 Martin Luther King Jr. Dr., Olin Building, Room 503 ⋄ Cleveland, OH 44106

EDUCATION

Case Western Reserve University *Jan. 2018 - May 2021 (expected)*
Ph.D. in Computer Science
Thesis Title: *"Modeling and Quantification of Profile Matching Risk in Online Social Networks"*
Advisor: Asst. Prof. Dr. Erman Ayday

Bilkent University *Sep. 2015 - Dec. 2017*
Ph.D. in Computer Engineering
Advisor: Asst. Prof. Dr. Erman Ayday

Epoka University *Nov. 2014 - Jul. 2015*
M.Sc. in Computer Engineering
Thesis Title: *"On Fault-Tolerance and Intrinsic Universality of the Nubot Model"*
Thesis Advisor: Asst. Prof. Dr. Ilir Çapuni

Epoka University *Oct. 2010 - Jun. 2014*
B.Sc. in Computer Engineering
Thesis Title: *"New Host Specificity Index"*
Thesis Advisor: Asst. Prof. Dr. Ilir Çapuni

RESEARCH INTERESTS

Privacy, Security, Online Social Networks Analysis, Genomic Privacy, Machine Learning.

WORK EXPERIENCE

Case Western Reserve University, Department of Computer and Data Sciences Jan. 2018
- now
Research Assistant *Cleveland, Ohio, USA*

· Developing new methods to quantify and mitigate profile matching risk across online social networks
· Developing new techniques to verify the output of statistical tests in a privacy-preserving way

Case Western Reserve University, Department of Design & Innovation Jun. 2020 - Aug.
2020
Software Developer *Cleveland, Ohio, USA*

· Part of the team for developing *ShareTrace: A Smart Privacy-Preserving Contact Tracing Solution by Architectural Design During an Epidemic*
· Privacy and security analysis of ShareTrace
· Implementation of the algorithm to build the interaction graph and the propagation of the users' risk scores

Ecole Polytechnique Fédérale de Lausanne (EPFL) Jun. 2019 - Sep. 2019
Research Intern (advised by Prof. Jean-Pierre Hubaux) *Lausanne, Switzerland*

· Privacy-preserving solutions for workflow provenance

Case Western Reserve University, Teaching and Learning Technologies   May. 2018 - Aug. 2018

Remote Online Class Support   *Cleveland, Ohio, USA*

· Providing support during online teaching on zoom

Epoka University, Department of Computer Engineering   Jun. 2014 - Jun. 2015

Research Assistant   *Tirane, Albania*

· Exploring more about Nubot Model
· Making Nubots fault tolerant (part of my Master Thesis)

Surat Teknoloji   Jul. 2013

Summer Internship   *Istanbul, Turkey*

· Building market management system in C#

AWARDS AND HONORS

- Student Travel Grant for PETS 2019

- Full Graduate Scholarship at Bilkent University, 2015-2017

- Full Graduate Scholarship at Epoka University, 2014-2015

- ICT Thesis of the Year Award (4 Year Bachelor), 2014

- Ranked 1st in Epoka Computer Engineering Department based on the graduation degree, 2014

- Full Undergraduate Scholarship at Epoka University, 2010-2014

PUBLICATIONS

- Y. Yoo, E. Ayday, and **A. Halimi**. **"An Anonymous Network Propagation Model to Detect Covid-19 Risks"**, In Proceedings of *the 2nd International Workshop on Social Health in the Era of Big Data (SHEBD)*, 2021.

- **A. Halimi** and E. Ayday. **"Efficient Quantification of Profile Matching Risk in Social Networks"**, In Proceedings of *the 25th European Symposium on Research in Computer Security (ESORICS)*, 2020.

- **A. Halimi** and E. Ayday. **"Profile Matching Across Online Social Networks"**, In Proceedings of *International Conference on Information and Communications Security (ICICS)*, 2020.

- I. Çapuni, **A. Halimi**, and D. Hitaj. **"Towards Indestructible Molecular Robots"**, *SOFSEM (Student Research Forum Papers / Posters)*, Pec pod Snezkou, Czech Republic, Jan. 2015.

WORKING PAPERS

- **A. Halimi**, L. Dervishi, E. Ayday, A. Pyrgelis, J. R. Troncoso-Pastoriza, J. P. Hubaux, X. Jiang and J. Vaidya. **"Privacy-Preserving and Efficient Verification of the Outcome in Genome-Wide Association Studies"**, arXiv preprint arXiv:2101.08879, 2021.

- E. Ayday, Y. Yoo and **A. Halimi**. **"ShareTrace: An Iterative Message Passing Algorithm for Efficient and Effective Disease Risk Assessment on an Interaction Graph"**.

TEACHING EXPERIENCE

Case Western Reserve University, Department of Electrical Engineering and Computer Science   Jan. 2018 - May 2019
Teaching Assistant   *Cleveland, Ohio, USA*

- EECS 356/456 - Data Privacy, Spring 2019
- EECS 233 - Introduction to Data Structures, Fall 2018
- EECS 600 - Data Privacy, Spring 2018

Bilkent University, Department of Computer Engineering   Sep. 2015 - Dec. 2017
Teaching Assistant   *Ankara, Turkey*

- CS 101 - Algorithms and Programming I, Fall 2015, Fall 2016, Spring 2017
- CS 102 - Algorithms and Programming II, Spring 2016, Fall 2017
- CS 577 - Data Privacy, Spring 2017

Epoka University, Department of Computer Engineering   Oct. 2014 - Aug. 2015
Teaching Assistant   *Tirane, Albania*

- CEN 254 - Data Structures, Spring 2015
- CEN 112 - C and C++ Programming, Spring 2015
- CEN 303 - Analysis of Algorithms, Fall 2014
- CEN 101 - Introduction to Algorithms and Programming, Fall 2014

TECHNICAL STRENGTHS

Computer Languages	Python, Matlab, R, Java, PHP/HTML
Protocols & APIs	Twitter and Foursquare API, XML, JSON
Databases	PostgreSQL, MySQL, Microsoft SQL
Tools	LaTex, Putty, RStudio, PythonXY, Microsoft Office
Operating Systems	Linux, Windows

LANGUAGE SKILLS

Albanian	native
English	fluent
Turkish	advanced
Italian	basic

SERVICE

Program Committee Member

- IEEE S&P Student PC 2019
- IEEE S&P Poster Jury Member 2019

Subreviewer

- PETS 2021, 2020, 2019
- ACM CCS 2019, 2018, 2016
- NDSS 2017
- AsiaCCS 2018, 2017, 2016