Elio Nushi

CONTACT & PERSONAL INFORMATION	**Address**: Pietari Kalmin katu 5, Exactum B211, Helsinki, Finland, 00560
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	Website: enushi.github.io
	Date of Birth: 05 August 1993
	Nationality: Albanian

EDUCATION

University of Helsinki (UH), Helsinki, Finland

PhD, Computer Science · Sep. 2020 - Present
- Research Topic: I am developing probabilistic and statistical methods for computational biology. One important goal of the research is to understand the regulation of toxin production in the potentially deadly environmental pathogen Clostridium botulinum.
- Supervisor: Antti Honkela, PhD, University of Helsinki

Åbo Akademi University (ÅAU), Turku, Finland

MPhil, Computer Science, GPA: 5.0/5.0 · Aug. 2018 - Jun 2020
- Master's Thesis Title: *On the Applicability of Network Science in Personalized Medicine*
- Supervisors: Ion Petre, PhD, University of Turku & Eugen Czeizler, PhD, Åbo Akademi University

University of New York Tirana (UNYT), Tirana, Albania

BSc, Computer Science, GPA: 3.8/4.0 · Sep. 2013 - Jun. 2017
- Senior Project's Title: *On the performance of Linux Operating System under XEN, Oracle VM VirtualBox and VMware Player Hypervisors*
- Adviser: Marenglen Biba, PhD, University of New York Tirana

RESEARCH & WORK EXPERIENCE

Doctoral Researcher

University of Helsinki, Helsinki, Finland · Sep. 2020 - Present
Supervisor: Antti Honkela, PhD, University of Helsinki
- Develop probabilistic and statistical methods for computational biology

Software Developer

If P&C Insurance Ltd, Turku, Finland · Aug. 2019 - Jul. 2020
- Worked as a full stack C#.Net developer
- Responsible for maintaining and developing the Nordic customer insurance portal of the company

Software Developer

FCE Services, Tirana, Albania · Oct. 2017 - Jul. 2018
- Worked as PHP Back-End Developer for a client company
- Responsible for managing e-commerce websites using the Magento platform

Software Developer

Protech, Tirana, Albania · May 2017 - Oct. 2017
- Developed the billing system software for a VoIP company using PHP and JavaScript
- Automated the process of generating soft switch (Asterisk) configurations for VoIP clients to help the NOC department

Teaching Assistant

Probabilistic models, variational inference and probabilistic programming -
Nordic ProbAI School 2022, Helsinki · Jun. 2022

Data Analysis with Python -
University of Helsinki, Helsinki · Nov. 2021 - Aug. 2024

Algorithms and Complexity -	
University of New York Tirana, Tirana	Feb. 2017 - Jun. 2017
Calculus II -	
Univeristy of New York Tirana, Tirana	Feb. 2016 - Jun. 2016
Discrete Mathematics -	
University of New York Tirana, Tirana	Sep. 2016 - Feb. 2017
Calculus I -	
University of New York Tirana, Tirana	Feb. 2015 - Jun. 2015

DATA SCIENCE PROJECTS

- Project on predicting true vs fake news titles (Advanced Machine Learning)
- Project on applying centrality methods for personalized medicine (Master's Thesis)
- Project on applying statistical methods for multiple myeloma patients' dataset (Lab Internship)
- Project on the study of genes connected with autism (Computational Biology)

COMPUTER SKILLS AND COMPETENCES

- Programming languages and frameworks: Python, Django, Java, Java Server Faces (JSF), VB.NET, C#.NET, ASP.NET, PHP, JavaScript, HTML, CSS, Bootstrap, and PL SQL
- Database systems: Oracle, MySQL, SQLite, and Microsoft SQL Server
- System administration: Linux Server Configuration, set up and configure computer network devices

PERSONAL RESEARCH FUNDING AND SCHOLARSHIPS

- Four year funding from the Helsinki Institute of Information Technology (HIIT) Sep. 2020 - Dec. 2024
- Scholarship consisting of full tuition fee waiver and excellence award to cover the living expenses during my master's studies from Åbo Akademi University (ÅAU) Aug. 2018 - Jul. 2020

PUBLICATIONS

Book Chapters

1. Network Modelling Methods for Precision Medicine (Nushi, Elio et al., *Systems Biology Modelling and Analysis: Formal Bioinformatics Methods and Tools*)

CONFERENCES & WORKSHOPS

Workshops

1. Poster presentation at ISMB (Intelligent Systems for Molecular Biology 2024), Montreal, Canada   Jul. 2024
2. Speaker at MASAMB23 (Annual Workshop on Mathematical and Statistical Aspects of Molecular Biology 2023), Johannes Kepler University, Linz, Austria   Sep. 2023
3. Attended ELLIS Summer School on Machine Learning for Healthcare and Biology, Manchester, UK   Jun. 2023
4. Attended Oxford Machine Learning Summer School (OxML 2022), ML x HEALTH, Oxford, UK   Aug. 2022

LANGUAGES

- Albanian: Native
- English: Fluent
- Italian: Fluent
- Finnish: Beginner

EXTRA-CURRICULAR ACTIVITIES

- Board member of the Finnish Society for Bioinformatics   May 2023 - Present
- University of Helsinki student ambassador   Jan. 2022 - Aug. 2023
- Volunteer member in the organizing committee of ProbAI 2022 summer school
- Sports: Gym, Judo, Swimming
- Music: Play Violine