Fateme Nateghi Haredasht

Curriculum Vitae

Experience

Jan – Apr (2023)	**Postdoctoral researcher** ○ **Public health and primary care** **Faculty of Medicine**, KU Leuven, *Belgium*

Education

Jan 2019 – Jan 2023	**PhD in Biomedical Sciences** ○ **Thematic program: Health & Technology** **Faculty of Medicine**, KU Leuven, *Belgium*
2014–2017	**M.Sc. Biomedical Engineering (Bioinformatics)**, *Department of Biomedical Engineering, Amirkabir University of Technology (Tehran Polytechnic)*, Tehran, *Iran* GPA: **19.15/20** (First Rank.)
2011–2012	**M.Sc. Communications Engineering (Left to study at AUT)**, *Department of Electrical Engineering, University of Guilan*, Rasht, *Iran*
2007–2011	**B.Sc. Electrical Engineering**, *Electrical Engineering Department, University of Guilan*, Rasht, *Iran* GPA: **16.41/20** (3rd Rank.)

PhD Thesis

Title	***Development of predictive models for critically ill patients with acute kidney injury***
Supervisor	Prof. dr. Celine Vens
Co-supervisor	Prof. dr. Hans Pottel
Co-supervisor	dr. Wouter De Corte
Co-supervisor	dr. Liesbeth Viaene

Master Thesis

Title	***Nonlinear dynamic causality inference in microarray short-term time series.***
Supervisor	Prof. Mohammad Hassan Moradi

Research Interests

Machine Learning

Semi-supervised Learning

Explainable AI

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AI for Healthcare
Survival Analysis
Biostatistics

━━━━━━ Publications

Journal   Pooya Ashtari, Fateme Nateghi Haredasht, Hamid Beigy, **"Supervised fuzzy partitioning,"** Pattern Recognition, vol. 97, p. 107013, 2020.

Journal   Fateme Nateghi Haredasht, Maria Antonatous, Etienne Cavalier, Pierre Delanaye, Hans Pottel, Konstantinos Makris, **"The effect of different consensus definitions on diagnosing Acute Kidney Injury-events and their association with in-hospital mortality,"** Journal of Nephrology (2022), pp.1-9.

Journal   Fateme Nateghi Haredasht, Celine Vens, **"Predicting Survival Outcomes in the Presence of Unlabeled Data,"** *Machine Learning* 2022, pp.1-19

Journal   Fateme Nateghi Haredasht, Liesbeth Viaene, Celine Vens, Nico Callewaert, Wouter De Corte, Hans Pottel, **"Comparison between cystatin C- and creatinine-based estimated glomerular filtration rate in the follow-up of patients recovering from a stage 3 AKI in ICU,"** Journal of Clinical Medicine 11, no. 24 (2022): 7264.

Journal   Fateme Nateghi Haredasht, Laban Vanhoutte, Celine Vens, Hans Pottel, Liesbeth Viaene, Wouter De Corte, **"Validated prediction models for outcomes of acute kidney injury: systematic review,"** BMC Nephrology: 2023 (under review after revision submission).

Journal   Fateme Nateghi Haredasht, Kazeem Adesina Dauda, Celine Vens, **"Exploiting censored information in self-training for time-to-event prediction,"** Computer Methods and Programs in Biomedicine: 2023 (submitted).

Journal   Fateme Nateghi Haredasht, Liesbeth Viaene, Wouter De Corte, Hans Pottel, Celine Vens, **"Predicting outcomes of acute kidney injury in critically ill patients using machine learning,"** Scientific Reports: 2023 (under review).

Conference   Fateme Nateghi Haredasht, Konstantinos Makris, Pierre Delanaye, Hans Pottel, **"Association of AKI-event defined by Different Definitions with In-hospital Mortality"**, 2021.ERA-EDTA.

Conference   Fateme Nateghi Haredasht, Liesbeth Viaene, Wouter De Corte, Celine Vens,**"Exploiting unlabeled data to predict the development of CKD after AKI in critically ill patients"**, 2021. Intelligence Artificielle & Néphrologie.

Symposium   Fateme Nateghi Haredasht, Celine Vens,**"Predicting Survival Outcomes in the Presence of Unlabeled Data"**, 2019. Annual IEEE EMBS Benelux Chapter Symposium.

Conference   Fateme Nateghi Haredasht, Mohammad H. Moradi,**"Nonlinear Causality Inference in Microarray Time Series"**, 2019. Published in BNAIC/BENELEARN.

Conference   Fateme Nateghi Haredasht, Farnaz Ghassemi, Mohammad H. Moradi,**"Causal inference of gene expression data using a clustering-based extension of kernel-Granger causality"**, 2016. Published in the Iranian Conference of Biomedical Engineering (ICBME). (indexed by IEEE).

━━━━━━ Supervisory Experience

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✆ *+32 (493) 68 4113* • ✉ *fateme.nateghi@kuleuven.be*
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🖥 *fatemenateghi.github.io*   2/4

2019 **Time to event analysis for regularized high-dimensional survival analysis models**, *Daily supervisor of Mateusz Blommaert for Master of Science in Engineering*, KU Leuven.

2020 **Student researcher**, *Daily supervisor of Laban Vanhouttes*, Medical student, KU Leuven-Kulak.

2021 **Student researcher**, *Daily supervisor of Fauve Goethals*, Medical student, KU Leuven-Kulak.

2022 **The quest for early markers for Alzheimer's disease using genomic and machine learning approaches**, *Daily supervisor of Adnan Kaan Ekiz for Masters of Bioinformatics* , KU Leuven.

Honors and Awards

2016 **1ˢᵗ Rank**, among all graduate students in Bioinformatics and Bioelectric (about 40) at AmirKabir University of Technology

2011 **3ʳᵈ Rank**, among all undergraduate students in Electrical Engineering (about 35) at University of Guilan, Rasht

2012 **Awarded** candidacy for entering M.Sc. program of University of Guilan without entrance exam because of exceptional students policy.

2007 **Awarded** a four-year entrance scholarship, Faculty of Engineering University of Guilan.

Teaching Experience

Spring 2020-2023 **Teacher assistant for practical sessions**, *Bioinformatics course*, Prof. Vens, KU Leuven-Kulak campus

Spring 2020-2022 **Teacher assistant for practical sessions**, *Bioinformatics course*, Prof. Vens, KU Leuven-Kulak campus

Fall 2019 **Teacher assistant for practical sessions**, *Bioinformatics course*, Prof. Vens, KU Leuven-Kulak campus

Fall 2016 **Teacher assistant for R**, *Statistical analysis of medical data*, Dr. Ghassemi, AmirKabir University of Technology

Spring 2016 **Graduate teaching assistant**, *Advanced digital signal processing*, Dr. Almasganj, AmirKabir University of Technology

Fall 2012 **Graduate teaching assistant**, *Stochastic processes*, Dr. S. Harsini, University of Guilan

Workshops and summer schools

Winter 2019 **Milan Critical Care Datathon and ESICM's Big Datatalk**, *ESICM*, Milan, Italy

Summer 2019 **Summer School FLAMES 2019**, *FLAMES*, Gent, Belgium

Summer 2021 **4th International School on Deep Learning DeepLearn 2021 Summer**, *DeepLearn 2021 Summer*, Las Palmas de Gran Canaria, Spain

Summer 2022 **Cambridge Ellis Machine Learning Summer School**, *Cambridge Ellis*, Cambridge, UK

The Cambridge Ellis Machine Learning Summer program accepted me and provided me with a travel

grant.

Technical Skills

Programming	R, Python
Processor	LaTeX, Microsoft office

Languages

Persian	**Native**
English	**Fluent**
Dutch	**Beginner**

Hobbies

Reading books, High-intensity interval training (HIIT), Cooking, Biking, Movies

References

Supervisor	**Prof. dr. Celine Vens**, *Assiatant Professor*, Faculty of Medicine, KU Leuven, Kulak Kortrijk, Belgium
Co-supervisor	**Prof. dr. Hans Pottel**, *Professor*, Faculty of Medicine, KU Leuven, Kulak Kortrijk, Belgium
Co-supervisor	**dr. Wouter De Corte**, *Anesthesiologist, Intensivist*, Department of Intensive Care Medicine, AZ Groeninge Hospital Kortrijk, Belgium
Co-supervisor	**dr. Liesbeth Viaene**, *Nephrologist,*, Nephrology center, AZ Groeninge Hospital Kortrijk, Belgium
	Prof. dr. Mohammad Hassan Moradi, *Professor*, Department of Biomedical Engineering, AmirKabir University of Technology, Hafez, Tehran, Iran
	Prof. dr. Farnaz Ghassemi, *Assistant Professor*, Department of Biomedical Engineering, AmirKabir University of Technology, Hafez, Tehran, Iran

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