



Ioanna Gemou

igemou.github.io ♦  +1 (401) 712-8411 ♦  ioanna_gemou@brown.edu

Education

<i>Ph.D. in Computer Science</i> Brown University Advisor: Ritambhara Singh	August 2025 - Present
<i>Master's in Biomedical Engineering</i> Technical University of Denmark Advisor: Dimitrios Papadopoulos	September 2023 - July 2025
<i>Master's in Electrical and Computer Engineering</i> University of Patras Advisor: Konstantinos Moustakas	October 2018 - July 2023

Experience

<i>Visiting Research Fellow</i> Brown University Advisor: Nikos Vasilakis, Ritambhara Singh	August 2024 - February 2025 Providence, RI, USA
<ul style="list-style-type: none">• Led the end-to-end development of the Digital Pyramids Text data-processing pipeline, from system design through front-end integration to server deployment.• Worked on a composable utility library for machine learning.• Contributed to a model-agnostic framework that extracts diverse, biologically meaningful reasoning paths from biomedical knowledge graphs to improve prediction and interpretability.	
<i>Electronics & Software Engineer (Part Time)</i> Radiometer Medical A/S	September 2023 - July 2024 Copenhagen Capital Region, Denmark
<ul style="list-style-type: none">• Performed hardware and software verification testing on medical devices to ensure compliance with safety and performance standards.• Developed and executed automated test scripts, reducing manual testing time.	
<i>Research Assistant</i> University of Athens Advisor: Athanasios Lourbopoulos	December 2022 - May 2024 Athens, Greece
<ul style="list-style-type: none">• Led the development and implementation of machine learning methods for neuroimaging and data analysis in neurological disorders.	
<i>Software Engineer (Erasmus Placement)</i> Bionos Biotech S.L	June 2022 - August 2022 Valencia, Spain
<i>Programming Instructor</i> Patras Codecamp	November 2021 Patras, Greece

Publications

Peer-reviewed Conference Publications

- P1. Abdullahi, T., **Gemou, I.**, Nayak, N. V., Murtaza, G., Bach, S. H., Eickhoff, C., Singh, R., “K-Paths: Reasoning over Graph Paths for Drug Repurposing and Drug Interaction Prediction”. In: ACM KDD’25. 2025

Service	18th European Workshop on Systems Security (EuroSec 2025) Web & Publication chair	2025
Honors & Awards	Motor Imagery Brain–Computer Interface for Stroke Rehabilitation 1st Prize in the competition organized by the AI Hub at the University of Patras.	November 2022
	IEEE Xtreme 16.0 Competition Team name: “notWizards”. Placed globally at the top 4% among 6373 teams.	October 2022
Volunteering	IEEE Student Branch – University of Patras Chairperson, Biomedical Engineering Scientific Group Coordinator, & Head of PR	October 2021 – June 2023
	<ul style="list-style-type: none"> • As Chairperson (June 2022 – June 2023), organized educational activities and oversaw scientific groups and committees (50 members total). • As Biomedical Engineering Scientific Group Coordinator (Oct 2022 – June 2023), led weekly meetings on machine learning applications in biomedicine and supervised projects for a 10-member team. • As Head of PR (Oct 2021 – Sep 2022), managed communications and relationships with external organizations. • Received the <i>IEEE Exemplary Student Branch Award</i> for the 2022–2023 academic year. 	
Languages	English (fluent), Greek (native), French (beginner), Spanish (beginner)	
References	Prof. Ritambhara Singh CS Department Brown University Providence, RI, USA ritambhara@brown.edu	Prof. Nikos Vasilakis CS Department Brown University Providence, RI, USA nikos@vasilak.is
	Prof. Konstantinos Moustakas ECE Department University of Patras Rion-Patras, Greece moustakas@ece.upatras.gr	

Last updated: August 27, 2025