



# Panagiotis Xiropotamos

MSc. Student in Bioinformatics and Biomedical Data Science

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[Panagiotis Xiropotamos](#)

Athens, Greece

*"As a MSc student in biomedical data science, I am impassioned at the intersection of biology and computer science. In a field immersed of data, my drive lies in deciphering biological insights hidden within vast datasets. Dedicated to translating raw data into meaningful knowledge, bridging the gap between computational analysis and biological relevance."*

## Education

- MSc. in Data Science and Information Technologies with a specialization in Biomedical Data Science and Bioinformatics**

 Department of Informatics and Telecommunications, Faculty of Science, National and Kapodistrian University of Athens, Athens Greece

October 2022 - Present (Expected: Summer/September 2024)

- BSc. in Biology**

 Department of Biology, University of Patras, Patra Achaia Greece

September 2018 - September 2022

## Research and work experience

- Bioinformatics research assistant, DianaLab, Hellenic Pasteur Institute**
  - Construction and analysis of gene regulatory networks, leveraging expression data and transcription factor binding.  
(May 2023 - present)
- MSc. Thesis, National and Kapodistrian University of Athens and Athena RC**
  - "Deciphering transcription factor interactions through deep learning interpretation.", supervisor: Dr. George K. Georgakilas  
(September 2023 - present)
- Bioinformatics research assistant, SgourouLab, Hellenic Open University**
  - miRNA and ChIP-seq analysis on erythropoiesis related project  
(September 2021 - September 2022)
- Internship, Genomics Facility, B.S.R.C. "Alexander Fleming"**
  - Next Generation Sequencing technologies and bioinformatics analysis.
    - Hands on library preparation and quality control
    - 3' RNA-seq transcriptomic analysis for quantification of gene expression  
(July 2022 and August 2022)
- Lab member (BSc. Thesis), GeneticsLab, University of Patras**
  - "Modeling the chromatin state during T-cell differentiation using deep learning", supervisor: Dr. George K. Georgakilas  
(September 2021 - September 2022)

## Publications and Conferences

- Poster Presentation** at 73rd National Conference of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB 2023)
  - "Deciphering TF dynamics during T-cell differentiation: Transcription factor motif identification through deep learning interpretation"**
- Poster Presentation** at 72nd National Conference of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB 2022)
  - "aPEACH: automated pipeline for the analysis of ATAC- and ChIP-seq data"**
- Google Scholar**

## Certificates

- Python for Genomic Data Science (Coursera - Johns Hopkins University, 11/2021)
- Neural Networks and Deep Learning (Coursera – DeepLearning.AI, 10/2021)
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization (Coursera – DeepLearning.AI, 11/2021)

## Awards

- 2nd place at the AI-hub competition, University of Patras (2022)  
"Modelling the chromatin state during T-cell differentiation using deep learning"

## Skills

### Operating systems

Microsoft Windows  
UNIX based (linux and MacOS)  
Command-line interface  
Anaconda environments



### Programming Languages

Python  
R  
Perl  
Matlab  
Fiji-macros  
SQL



### Machine Learning and Deep learning

Sci-kit learn  
Model development, training and interpretation with keras and tensorflow



### Visualization

Plotly  
Adobe Illustrator  
Adobe Photoshop



### Office suite

Word  
Powerpoint  
Excel



### Next generation sequencing analysis

ATAC-seq  
ChIP-seq  
RNA-seq  
miRNA-seq

## Communication

English (C1 - TOEIC)  
Greek (Native speaker)  
German (Zertifikat C1)

## Extracurricular activities

**BioTeamUpatras (BITUP) member**  
Volunteer in communicating biology to both students and general public.(2021-2023)