Spyridon (Spiros) Baxevanakis

Larisa, Greece

☐ (+030) 698 446 4754 | ✉ sprbax@gmail.com | 🏠 spirosbax.com | ⌨ spirosbax | 🔗 spirosbax | 🐦 @spirosbax | ✒ Spiros Baxevanakis

Formal Education

BSc in Informatics
Dept. of Informatics, Ionian University

Corfu, Greece
Oct. 2016 - Aug. 2020

- Graduated 1st in my class, 11th in department history, 96.6th percentile
- Grade: 8.92 / 10, Upper Division GPA: 3.66 / 4.0
- Received the Ionian University Excellence Award (500€)
- Two-month internship as a Software Engineer
- Undergraduate Research Assistant for 1 year
- 2 workshop papers in peer-reviewed conferences
- Founder and Chairman of the University's IEEE Student Branch
- Thesis title "Stochastic Processes and Methods in Computational Physics"

Further Education

Statistical Inference
Johns Hopkins University

Coursera
May 2021

- Certificate available here.
- For the course project I created the following two PDF reports in R:
    1. Application of the Central Limit Theorem on the Exponential distribution.
    2. Exploratory Analysis of the ToothGrowth dataset.
- Github repository with the reports.

Deep Learning Specialization (5 courses)
DeepLearing.AI

Coursera
October 2020

- Certificate available here.

Julia Scientific Programming
University of Cape Town

Coursera
December 2019

- Completed with Honors.
- Certificate available here.

Current Positions and Positions Held

Informatics Private
Greek Army

Larisa, Greece
Nov. 2020 - Present

- Currently fulfilling my military obligations as required for all Greek males over the age of 18.

Undergraduate Researcher Assistant
Computational Modeling Laboratory (CMODLab), Ionian University

Corfu, Greece
Jul. 2019 - Jun 2020 (1 year)

- Worked with Prof. Markos Avlonitis and his team in a research project for the simulation dry metal friction. I was tasked with:
    - finding and summarizing relative research,
    - rapid prototyping computational models and
    - present simulation results to the team.
- Supervised a team of three Undergraduate Research Assistants to create software and visualization tools for the lab.
- Tools used: Python Suite (numpy, pandas, scipy, jupyter, matplotlib, seaborn), Wolfram Mathematica, Rust, Mendeley.

Software Engineer Intern
Creative Web Applications (CWA)

Corfu, Greece
Jul. 2019 - Aug. 2019 (2 months)

- Responsible for creating an automated preprocessing and data management system for the EU research project "e-Olive".
- The system handled over 100,000 sensor measurements ($\approx$ 5000 daily) of environmental conditions from dozens of sensors scattered throughout the northern part of Corfu island.
- My manager was Dr. Karydis Ioannis who is also an Assistant Professor at the Department of Informatics, Ionian University.
- Project link: http://www.e-olive-project.eu/about/
- Tools used: MySQL, Python (datetime, os, glob), Bash scripting

Publications

Towards a Personalized Multimodal System for Natural Voice Reproduction *SMAP Conference*

Stelios Gavras, Spiros Baxevanakis, Dimitris Kikidis, Efthymios Kyrodimos and Themis Exarchos *2020*

- In the 15th International Workshop on Semantic and Social Media Adaptation and Personalization (SMAP).
- View on IEEEXplore.
- PDF available here.

A Machine Learning Approach for Gender Identification of Greek Tweet Authors *PETRA Conference*

Spiros Baxevanakis, Stelios Gavras, Despoina Mouratidis and Katia Lida Kermanidis *2020*

- In the Proceedings of the 13th ACM International Conference on PErvasive Technologies Related to Assistive Environments, Interpretation and Understanding (PETRA Conference, NOTION Workshop).
- View on ACM Digital Library.
- PDF available here.

Honors & Awards

2020   **Ionian University Excellence Award (500€),** Ionian University   *Corfu, Greece*

Conferences and Workshops

15th International Workshop on Semantic and Social Media Adaptation & Personalization (SMAP) *Virtual Event*

Attendee & Presenter *29-30 Oct. 2020*

13th ACM International Conference on PErvasive Technologies Related to Assistive Environments (PETRA) *Virtual Event*

Attendee & Presenter *30 June 2020*

- Presented our paper at the 5th International Workshop on Human Behaviour Monitoring, Interpretation and Understanding (NOTION)

5th IEEE Hellenic Students and Young Professionals *Democritus University of Thrace, Xanthi, Greece*

Attendee & Presenter *8-10 Nov. 2019*

Extracurricular Activity

IEEE Student Branch of the Ionian University *Corfu, Greece*

Founder & Chairman *Oct. 2018 - May 2020*

- Started and organized an effort to create an IEEE Student Branch at the Ionian University. After coordinating with professors, Department and University Heads as well as gathering support from students, the Branch was founded on October 2018.
- While I was Chairman with my team of 8 students the Branch activities were:
  - Personally taught a course titled "Introduction to Programming with Python" to freshmen. Course material available here,
  - University participation in IEEEXtreme 13 hackathon,
  - "Intoduction to Unix & Linux" talk,
  - "Introduction to Git" talk (Networking event afterwards),
  - 2 Arduino Workshops,
  - Invited the CEO of the Corfu-based company Open-Tech to talk about alternative models of running a business,
  - The Branch won 1st place in the Poster Competition of the 5th IEEE Hellenic Student & Young Professional Congress (50€ symbolic prize).
- Nowadays the Branch is headed by a team of 13 students and it still very active!
- Branch Facebook Page.
- Branch Github Page.

Noteable Projects

Reproducing Neural Style Transfer

Personal   *2020*

- Reproduced the 2015 paper titled "A Neural Algorithm of Artistic Style" by Leon A. Gatys, Alexander S. Ecker and Matthias Bethge and created a blog post that explains the code as well as the paper's methodology. The code is written in TensorFlow.
- Link to the blog post.

Signal Processing Notebooks

Undergraduate Signal Processing course   *2020*

- A collection of 3 jupyter notebooks that I created for explaning the Fourier and Wavelet transforms in Julia.
- Github link here.

Hitting The Gym

Personal   *2018*

- Implemented the Policy Gradients and Q-Learning reinforcement learning algorithms in Python in order to solve OpenAIGym environments.
- Github link here.

Research Interests

Artificial Intelligence	Explainable AI, Causal AI, Probabilistic Graphical Models, Baysian Neural Networks, Causal Inference, Model-Based Learning
Deep Learning	Unsupervised Learning, Transfer Learning, Multi-task Learning, Multimodal Deep Learning, Self-Supervised Learning
Robotics	Reasoning and Planning for Mobile Robots, Human-Robot Interaction, Grounded Language Learning

Skills

Machine Learning	Implementing Deep Learning architectures (TensorFlow), Natural Language Processing (NLTK)
Computer Science	Data Preprocessing (Pandas, NumPy), Data Analysis (R), Web Scraping (Octoparse, urllib2)
Programming Languages	**Python**, **Julia**, Mathematica, C, Go, C++
Notable Software	**Linux**, Latex, MySQL, Vim, Bash
Interpersonal / Soft Skills	Team Leadership, Project Coordination and Planning, Thinking outside the box, Rapid Prototyping
Languages	Greek (Native), English (C2 Proficient, IELTS Academic 8.0 / 9.0)