SAPIR MARDAN

Developer with deep experience in Python, big-data analysis, backend scripting, tool development, and workflow automation across research and data-heavy environments.

sapmardan@gmail.com

Linkedin

Portfolio

SKILLS

Languages and Platforms: Python (incl. pandas, NumPy, matplotlib, seaborn, basic), Bash, Git, GitHub, SQL, Jupyter, R Linux, working knowledge with SQL, HTML/CSS, C# and C++.

Soft Skills: Analytical thinking, problem-solving, adaptability, collaboration, communication, attention to detail, initiative, strong passion to learn.

EDUCATION

MSc in Bioinformatics (First Class-Honours),
University of Bristol, Oct 2023 – Oct 2024.

PROJECTS HIGHLIGHTS:

- MSc dissertation project: **Developed a deep learning system (GAN-based) using Python and Pytorch** to simulate evolutionary dynamics and analyse visual camouflage adaptations.

- Implemented a computationally efficient simulation and parameter exploration of a forest fire propagation model, analyzing large-scale data and reporting results via GitHub.

- Built and **optimized machine learning models in Python using scikit-learn to classify data inputs**, focusing on performance and model interpretability. GitHub.

- Applied parallelization in Python to process long biological sequences, **reducing runtime by ~80% and enabling faster handling of large datasets.** GitHub.

- Designed a Python/Bash CLI tool to **automate complex workflows**, enabling efficient task execution for non-technical users **and reducing manual processing time**. GitHub.

- Built a personal project portfolio using GitHub Pages and HTML/CSS.

- Worked across multiple projects in Python, focusing on algorithm design, machine learning model development, performance tuning, testing, and statistical data analysis with visualization.

BSc in Biology (Second Class-Honours),
University of Tel - Aviv, Israel, Sep 2017 – Sep 2021.

ACHIEVEMENTS AND RECOGNITIONS

Presented MSc dissertation at Visual Ecology Symposium at University of Exeter, selected among top student projects by the department.

WORK EXPERIENCE

IT Assistant,
Computing Department, Tel Aviv University, Israel, 2021-2023.

- Led the technical setup and automation of a hybrid learning system, ensuring a stable digital platform for remote lecture access and improved student engagement.

- Provided technical troubleshooting and support to over 100 faculty members.

ONLINE COURSES

- Data Structure and Algorithms
- Advanced Deep Learning with PyTorch
- SQL for Data Science

EXTRACURRICULAR ACTIVITIES

- Secretary of Biology Society, *University of Bristol, (2023-2024).*
- Volunteered as sixth-graders biology teacher, *Tel-Aviv University, (2020).*
- Assisted children with special needs, *Beit Hayedidut, Tel-Aviv, (2014- 2016).*

VISA STATUS
Graduate visa holder.