Sara Pieri

Rome, Italy/Abu Dhabi, United Arab Emirates

Education

Artificial Intelligence - Computer Vision (MSc)

Aug. 2021 – May 2023

Mohammed Bin Zayed University of Artificial Intelligence (MBZUAI), GPA 3.9

Abu Dhabi, UAE

Artificial Intelligence and Robotics (MSc)

Rome, Italy

Sapienza University or Rome, GPA 4.0 (withdraw, 1 year only)

Sept. 2020 - Aug. 2021

Computer Science Engineering (B.S.)

Rome, Italy

Sapienza University of Rome, GPA 4.0

Sept. 2018 - Dec. 2021

Experience

MBZUAI - Research Assistant

May. 2023 - Present

NLP and Computer Vision

Abu Dhabi, UAE

- Development of state-of-the-art methods for Large Language Models in the Medical Domain: Supervision: Dr. Hisham Cholakkal, Dr. Fahad Khan.
- Conduct extensive literature reviews in large language models and their applications in the medical field.
- Design and implement new methods and evaluate the performance of existing ones, providing open source codebases.
- Write and publish research findings in reputable conferences and journals.

MBZUAI - Master Student Researcher in Artificial Intelligence

Jan. 2022 - May 2023

Research in Computer Vision

Abu Dhabi, UAE

- Explored architectural design choices to enhance performance under non-IID federated visual recognition settings. Publication: Handling Data Heterogeneity via Architectural Design for Federated Visual Recognition (NeurIPS-23). Supervision: Dr. Hisham Cholakkal and Dr. Samuel Horwath.
- $\bullet \ \ \text{Engage in academic research, contributing to the advancement of knowledge in the field of AI and Computer Vision.}$
- Actively participating in workshops, seminars, and conferences, and collaborations with fellow researchers.

G42, Inception Institute of Artificial Intelligence

May 2022 - April 2023

AI Intern Research and Development

Abu Dhabi, UAE

- Developed an innovative method for AI-based Medical Imaging and Profiling of live cells from medical images (e.g., tumor / non-tumor cells). Paper submission in progress: CellSDF: Exploring 2D Cell Shapes with Signed Distance Functions Supervision: Dr. Boulbaba Ben Amor.
- Produced research publications/presentations, led meetings, and provided presentations about ongoing research.
- Provided guidance and support to other associated students.

Sapienza University of Rome

Mar. 2020 - Jan. 2021

Green AI and Computer Vision

Rome, Italy

- Research Experience in Computer Vision for Beekeeping in Sapienza ALCOR Lab with Prof. Flora Pirri.
- Utilized deep learning techniques to analyze images and videos of bee colonies, enabling automated detection and tracking of individual bees, as well as identifying potential health issues.
- Conceived and launched a project for the protection of bees with AI, including several university-level entities.
- Actively participated in meetings and discussions with beekeepers and environmental organizations, gathered data on bee behavior and environmental factors, and discussed the integration of AI technologies in beekeeping strategies.

Technical Skills

Languages: Python, Java, C/C++, HTML/CSS, JavaScript, SQL

Os and Developer Tools: Linux, Windows, GitHub, VSCode, Wandb, Google Colab, Amazon Aws

Technologies/Frameworks: Pytorch, Hugging Face, Tensorflow, Keras, Pandas, Numpy, Scikit-learn, Qiskit, IATEX

Honors and Awards

- NeurIPS 2023 Scholar Award
- Received a full scholarship for academic achievements from MBZUAI
- Participating with a full scholarship by IBM Introduction to Quantum Computing
- Interviewed by the Italian newspaper Il Messagero
- Graduated with honors in Computer Engineering

Volunteering

- Reviewer Academic Papers (ICCV-23)
- ProSPES -APS (2019-current) support the growth and development of children and young adults