# MARCO PREZIOSI Al Software Engineer

in mpreziosi

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# WORK EXPERIENCE

#### AI Software Engineer

- **</>/>/ Python GoLang TypeScript Docker**
- Currently leading a team of 4 for algorithmic design and development efforts to seamlessly integrate a LLM into a chatbot solution for a help desk environment.
- Researching, developing and deploying deep learning algorithms for real-time video surveillance using RGB cameras and LIDAR sensors.
- Developed applications for **3D reconstruction** from monocular cameras, achieving a margin of error lower than 10% on points within 15 meters distance. These applications aimed to obtain a usable point cloud for autonomous driving systems, enabling real-time operation on embedded devices.

#### Machine Learning Researcher

**</>/> ROS** R

- Successfully addressed neural network optimization for a multitask network for Face Analysis on an embedded social robot device for images, resulting in a system's processing speed increase by 2.5 to 4 times, along with a memory space reduction of 2 to 4 times.
- Developed Deep Learning algorithms for audio signal processing, along with personalized and empathetic human-robot dialogue (HRI), considering real-time constraints.
- These models were tested and developed in the context of the European project FELICE.

#### Software Engineer

>	JavaScript	PHP	HTML	CSS	SQL				
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• Spearheaded the design, construction, and management of web-based software customized for the Italian healthcare sector and insurance firms, encompassing both front-end and back-end development.

#### Software Engineer

• Design and collaborate on implementing a prototype to enhance traditional video analysis algorithms' performance.

• Utilized semantic technologies and cutting-edge deep learning approaches.

# **EDUCATION**

<ul> <li>Master of Science in Computer Science - Artificial Intelligence Track</li> <li>4.00/4.00 GPA</li> <li>Thesis work: "Light-weight deep neural network for pedestrian detection in automotive applications"</li> </ul>	University of Salerno Sept 2019 - June 2021
<ul> <li>Bachelor of Science in Computer Engineering</li> <li>3.635/4.00 GPA</li> <li>Thesis work: "Semantic Technologies for improving tracking algorithms"</li> </ul>	University of Salerno Sept 2016 - June 2019

## **LEADERSHIP**

#### Pubblication (Author(s) and Title)

Marco Preziosi, "Fire Detection and Notification System in Real-Time Using a Lightweight YOLOv8-Based Detector" CCISP-IEEE 2023 (Accepted)

#### Sky Data Hackathon

Led presentation and Q&A discussions, highlighting the developed Generative AI solution aimed at enhancing the Sky Glass user experience.

### Supervisor of M.Sc. Computer Science students

Provided guidance and mentorship for student thesis work.

#### **Teaching Assistantships**

Assisted in the design and delivery of course materials for Cognitive Robotics, including lectures, assignments, and handson laboratory sessions.

# AWARDS AND GRANTS

Course of excellence winner: "Offensive Cybersecurity"	2021
Scholarship winner: "Cybersecurity for digital health applications" - $\in$ 12000	2021
Winner of 2 consecutive <b>scholarships</b> : "Cognitive Robotics" - €3500	2019-21
"Unisa premia il merito" ( <b>Full paid tuitions</b> toward my BSc and MSc - €7300)	2021

## SKILLS

Deep Learning	Computer	Vision NLP	Generati	iveAl Te	amwork	Presentatio	on Skills	Vertex AI	DataFlow
AWS Github	Docker	Tensorflow	Keras	PyTorch	Scikit	Spark ML	Numpy	OpenCV	ROS
HuggingFace	LangChain								

University of Salerno

**Sept 2021 – Jul 2022** 

Laser Navigation Srl. Aug 2022 - ongoing

# Cct 2020 - Sept 2021

My Admin Srl.

# A.I. Tech Srl.

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#### 2023. Online

2023, Sky

### 2022, University of Salerno

#### 2019-2021, University of Salerno