Mario Barbato

Personal Info

Address
Via Nino Bixio 46,
Napoli
80125

Date of birth
15 September 1998

Email
mariobarbatowork@gmail.com

Phone
3312383139

Place of birth
Pozzuoli (NA)

Skills

Large Language Models

Robot Behaviour Design

Machine Learning: Neural Networks

Retrieval Augmented Generation (RAG)

Software system design with UML support

Database Design, Development and Optimization

Continuous Integration & Continuous Deployment/Delivery (Jenkins)

Languages: C, C++, SQL, Java, Python, MATLAB, PHP, HTML

NAOqi Framework

Agent-based Architectures (LangGraph)

Research Activities

Nov 2024 - present

Ph.D. Student

PRISCA Lab & Logogramma s.r.l., Naples

Industrial Ph.D. offered by National Program "DRIM: Robotics and Intelligent Machines for Healthcare and Wellness of Persons" @ PRISCA Lab (University of Naples) and Logogramma s.r.l.
Topic: Context Awareness for Human-Robot Interactions using Large Language Models in Retrieval Augmented Generation systems (RAGs)

Apr 2024 - Oct 2024

Intern

PRISCA Lab, Naples

https://www.prisca.unina.it/

Models Development for Adaptive Robot Behavior based on Theory of Mind

Mar 2021 - Jul 2021

Intern

PRISCA Lab, Naples

https://www.prisca.unina.it/

Use of humour for managing uncertain multimodal perception.
Participation in the project 'Smart Factory' PON I&C 2014-2020 - 'BRILLO - Bartending Robot for Interactive Long Lasting Operations'

Education

Jun 2024 - Jul 2024

AI in Higher Education: how do we maximize its benefits and mitigate its risks?

U7+ & Ècole Polytechnique

Group work composed of interdisciplinary and international figures.
Presentation on the potential ethical risks of AI in education.

Sep 2021 - Oct 2024

Computer Science, Master's Degree

University of Naples "Federico II", Naples

GPA: 110/110 cum Laude
Curriculum in Artificial Intelligence
Experimental Master Thesis in Human-Robot Interaction:
Models Development for Adaptive Robot Behavior based on Theory of Mind

Sep 2017 - Jul 2021

Computer Science, Bachelor Degree

University of Naples "Federico II", Naples

GPA: 105/110
Experimental Thesis in Human-Robot Interaction:
Use of humour for managing uncertain multimodal perception.

Sep 2012 - Jul 2017

High School in Information Technology

I.S.I.S. "Pozzuoli", Pozzuoli (NA)

Publications

Aug 2024

Use of Irony and Sarcasm for Uncertainty in HRI

Authors: M. Barbato, A. Rossi, S. Rossi
Published at BAILAR Workshop at IEEE RO-MAN 2024, the 33rd IEEE International Conference on Robot and Human Interactive Communication, Pasadena, California, USA, August 26-30, 2024.

ROS Framework

ZeroMQ

Mobile development: Android

Unit and Integration Testing (JUnit, Mockito, Hamcrest)

Docker

Problem-solving

Precision and attention to detail

Collaborative attitude and team spirit

Critical spirit

European Driving License B

Python ML libraries: NumPy, Pandas, PyTorch, TensorFlow

Software

Office 365

Video Editing (VEGAS)

Languages

Italian - C2

English - B2

Hobbies and Interests

Computer Science in all its aspects, but also Soccer, Nature, Cinema & Acting, Dance and Video Games. Tirelessly curious, open to learning from any field.

Available at CEUR Workshop Proceedings, Volume 3906:
https://ceur-ws.org/Vol-3906/paper3_BAILAR.pdf

Work History

Feb 2018
- present

Private Tutor

Individual and group support for students aged 14 to 30,
Guidance, academic recovery, and/or motivational support for students preparing for tests, quizzes, and exams.
Academic support for students in revision activities to supervise the correct improvement in their study approach.

Jul 2019
- Aug 2019

Waiter

Surprise Bar, Monte di Procida, Naples

Volunteering

Mar 2024
- Jun 2024

University Soccer Tournament Organizer

May 2023
- Oct 2024

Student Representative of DIETI (Department of Electrical Engineering and Information Technology)