# **Antonio Roberto, PhD**

# ML Researcher | Applied Scientist

As an Applied Scientist, I've developed AI algorithms for various applications, published 11 scientific articles, and collaborated with leading institutions. Passionate about generative AI, I constantly keep myself up to date with new methodologies and technologies in the field.

#### **WORK EXPERIENCE**

# **Applied Scientist**

Sep 2024 - Present

Amazon, Turin, IT

 Design and development of Natural Language Processing algorithms for Amazon Alexa devices.

# **Machine Learning Researcher**

Feb 2023 - Sep 2024

Huawei Ireland Research Center, Dublin, IE

- Design and development of AI algorithms for anomaly detection in networking time series data. Improvement of 20% of the performance.
- Collaboration with customers to develop Networking Monitoring Standards (IETF).

# **Applied Scientist Internship**

Jun 2022 - Sep 2022

Amazon Alexa, Turin, IT

 Design and development of innovative speech recognition (ASR) algorithms for the Alexa platform, working over massive data sets (using Amazon SageMaker).

#### RESEARCH EXPERIENCE

# **Visiting Researcher**

Jul 2021 - Oct 2021

Ecole Nationale Superieure d'Ingenieurs de Caen, CAEN, FR

• Working on the research project: "Speech analysis for Speaker Identification and Soft-Biometrics recognition based on Deep Learning methods".

# EDUCATION

## Ph.D. in Computer Engineering

Dec 2019 - Dec 2022

University of Salerno, Salerno, IT

- Research in machine learning algorithms for Audio and Speech Analysis, Conversational AI with Large Language Models (LLMs), and Deep Learning models optimization for Embedded Systems.
- Publication of 9 articles to international conferences and Q1 journals.
- Leading of small (2/3) teams of students

## **MSc in Computer Engineering**

Oct 2016 - Dec 2018

University of Salerno, Salerno, IT - Grade 110/110 cum laude

• International thesis entitled "A method for forecasting financial time series based on empirical mode decomposition and manifold learning".

### CONTACT

- · Turin, IT (Open to relocate)
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- <u>linkedin.com/in/robertanto</u>
- · github.com/robertanto

#### **SKILLS**

#### Soft skills:

- · Teamwork and Leadership
- · Earn trust, Attention to details
- Curiosity, Creativity
- · Quick Learning
- · Innovation maker

#### Hard skills:

- Generative AI
- Time Series Analysis
- · Knowledge Graph Analysis
- Artificial Intelligence
- · Deep Learning
- Data Mining
- Speech Processing
- · Natural Language Processing
- Software Engineering

### Languages, Tools and Frameworks:

- · Python, Java, C, MATLAB
- · SQL, Cypher
- Tensorflow, Keras, PyTorch
- · ONNX, Tensor RT
- HuggingFace, Transformers
- LangChain
- · Apache Spark, Apache Airflow
- NumPy, Scikit-Learn, Scipy, Pandas
- Linux
- · Docker, Kubernetes
- · AWS, Google Cloud Platform

# **LANGUAGES**

Italiar

English (Professional)

#### **OTHER**

- · Saxophonist in a Blues band
- · Cultural Associationist