



## **Personal information**

Surname(s) / First name(s) Vitale, Vincenzo Norman

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Nationality(-ies) Italian

Date of birth 30 August 1989

Gender Male

**Positions** 

Date October 2023 - Now Assistant Professor

Institution Department of Electrical Engineering and Information Technology, DIETI, University

of Naples Federico II

Founded by RESTART consortium

Date October 2022 - September 2023

Position Post-Doc Researcher

Institution Interdepartmental Research Center "Urban/Eco", University of Naples "Federico II"

This is a project with corporate interests, whose activities concern research and development related to the use in the industrial field of 'End to End' speech recognition models based on neural networks. In particular, the activities will concern the training and the evaluation of the aforementioned models, with particular attention to aspects concerning both the explainability and the interpretability of these models.

Supervisor: Professor Francesco Cutugno, Urban/Eco Executive Director

Granted by: Cedat 85 s.r.l

Date | 2015 –

Freelance | Freelance in the IT sector

Date July 2022 - October 2022

Position | Project Manager

Institution 5G Academy, University of Naples "Federico II"

The role fell within the Lister project, concerning creating a translation system from spoken to sign language. The responsibilities included a small part concerning purely managerial aspects like contact with companies or resource management. On the other hand, most of the commitments were on aspects inherent to the design and

development of the models and pipelines that constitutes the project itself.

Supervisor: Professor Antonia Maria Tulino, DIETI, University of Naples "Federico II"

Date July 2021
Position Reviewer

Description | Scientific papers reviewer for "Frontiers in Artificial Intelligence" publishing company.

Date August 2020
Position Reviewer

Description | Scientific papers reviewer for "Hindawi" publishing company.

Date March 2020
Position Lecturer

Description Introduction to Microservices and Docker architectures. Introduction to Microservices

and Docker architectures, held during the Software Engineering II course, master's degree course in Computer Science at the University of Naples "Federico II"

Supervisor: Professor Sergio Di Martino, DIETI, University of Naples "Federico II"

Date February 2020 - June 2020
Role Term-contract Worker

Description Support for the development and validation of the components integrated into the PI-

COMIOT platform. At the Regional Center for Information Communication Technology

- CeRICT scrl

Supervisor: Professor Valentina Casola, DIETI, University of Naples "Federico II"

Date January 2020
Position Reviewer

Description Scientific papers reviewer for the "Web and Wireless Geographical Information Sys-

tems conference" (W2GIS) 2020.

Date December 2019

Role Lecturer

Description | Introduction to Android development. During the Software Engineering I class, CDL

in Informatica presso University of Naples "Federico II"

Supervisor: Professor Sergio Di Martino, DIETI, University of Naples "Federico II"

Date June 2019

Role Member of local organizing committee.

WETICE 2019 (28th IEEE International Conference on Enabling Technologies: In-

frastructure for Collaborative Enterprises)

Date May 2019
Position Lecturer

Introduzione ai Time Series Management Systems. Durante il corso di Basi di Dati II.

CDL magistrale in Informatica presso University of Naples "Federico II"

Supervisor: Professor Adriano Peron, DIETI, University of Naples "Federico II"

Date May 2019
Position Lecturer

Description | Introduction to Microservices architectures for web development. During the Web

Technologies II course, Bachelor Degree in Computer Science at the University of

Naples "Federico II"

Supervisor: Professor Anna Corazza, DIETI, University of Naples "Federico II"

Date May 2019
Position Lecturer

Progetto Introduction to Microservices and Docker architectures. During the Software Engi-

neering II course, Master's Degree in Computer Science at the University of Naples

"Federico II"

Supervisor: Professor Sergio Di Martino, DIETI, University of Naples "Federico II"

Date 25 March 2019 – 29 March 2019

Role Lecturer

Description | "Database Analytics" module at "FS Mobility Academy"

Supervisor: Professor Gennaro Nicola Bifulco, DICEA, University of Naples "Federico

11"

Date February 2018 – 2019 Role Software Engineer

Description Redesign and development of the "Caruso" Android application within the Research

Project of National Interest "CHROME"

Supervisor: Professor Francesco Cutugno, DIETI, University of Naples "Federico II"

**Experience and Training** 

August 2022 Summer School: "Linguistics and speech technology: from theory to tools to theory"

Organization University of Salento

November 2018 – May 2022 PhD in Computer Science obtained in the "ITEE - Information Technology and Electri-

cal Engineering" doctoral course at DIETI - Department of Electrical Engineering and

Information Technologies

Thesis Towards Cost-Performance Awareness in Fog-based Data Management Architec-

tures

Supervisor Professor Sergio Di Martino, DIETI, University of Naples "Federico II"

Organization University of Naples "Federico II"

Granted by AvioAero, a General Electric Aviation company

July 2020 English language certification

Grade Listening and Reading: C1 - evaluation through Cambridge Placement Test

Speaking: B2 - evaluation through CLA examiner

Organization CLA (Centro Linguistico di Ateneno) - University of Naples "Federico II"

June 2019 "14th International Summer School on Software Engineering"

Organization University of Salerno

September 2015 – October Master's degree in Computer Science, specialization in "Robotics and Advanced Cog-

2018 nitive Systems"

Grade 110/110 cum laude.

Thesis A protocol to collect interactive museum experiences information

Supervisor | Professor Francesco Cutugno, DIETI

Organization University of Naples "Federico II"

September 2010 – June 2015 Bachelor's degree in Computer Science

Grade 99/110

Thesis Implementation of a speech recognition system in Kaldi with support for out of vocab-

ulary words

Supervisor | Professor Francesco Cutugno, DIETI

Organization University of Naples "Federico II"

**Scientific Works** 

Date 2021

Description

Martino, S.D., Peron, A., Riccabone, A. and Vitale, V.N., 2021. Benchmarking management techniques for massive IIoT time series in a fog architecture. International Journal of Grid and Utility Computing, 12(2), pp.113-125.

Date 2020

Description

Di Martino, S. and Vitale, V.N., 2020, November. Massive Spatio-Temporal Mobility Data: An Empirical Experience on Data Management Techniques. In International Symposium on Web and Wireless Geographical Information Systems (pp. 41-54). Springer, Cham.

Date 2020

Description

Di Martino, S. and Vitale, V.N., 2020, September. An Haptic Interface for Industrial High-Precision Manufacturing Tasks. In Proceedings of the International Conference on Advanced Visual Interfaces (pp. 1-3).

Date | 2020

Description

Vitale, V.N., Olivieri, M., Origlia, A., Pretto, N., Rodà, A. and Cutugno, F., 2020, July. Acoustic Experiences for Cultural Heritage Sites: A Pilot Experiment on Spontaneous Visitors' Interest. In International Conference on Human-Computer Interaction (pp. 300-311). Springer, Cham.

Date 2019

Description

Di Martino, S., Vitale, V.N. and Bock, F., 2019, June. Investigating the Influence of On-Street Parking Guidance Strategies on Urban Mobility. In 2019 6th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS) (pp. 1-6). IEEE.

Date 2019

Description

Di Martino, S., Vitale, V.N. and Bock, F., 2019, June. Comparing different on-street parking information for parking guidance and information systems. In 2019 IEEE Intelligent Vehicles Symposium (IV) (pp. 1093-1098). IEEE.

Date | 2019

Description

Di Martino, S., Fiadone, L., Peron, A., Riccabone, A. and Vitale, V.N., 2019, June. Industrial internet of things: persistence for time series with NoSQL databases. In 2019 IEEE 28th International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE) (pp. 340-345). IEEE.

# Personal Skills and Competences

Mother tongue(s)

Other language(s)

Self-assessment European level<sup>(\*)</sup>

Inglese

### **Italian**

**English** 

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	B2	B2	C1

<sup>(\*)</sup> Common European Framework of Reference (CEF) level

#### IT Skills and Competences

Areas of Expertise

Human Computer Interaction (HCI), Natural Language Processing (NLP), Artificial Intelligence, Software Engineering, Industry 4.0

C, C++, Java

Bash, Python, R, Matlab, PHP, Javascript

PostgreSQL, Oracle, Mysql, Cassandra, Mongo, Timescale, InfluxDB, Redis Waterfall, SCRUM, DevOps

Scripting Languages
Database technologies
Software Development
Methodologies

Programming languages

Frameworks

Tensorflow, Pytorch, Pytorch-lightning, Nvidia Nemo toolkit, Android Framework, Docker

Other skills and tools

Docker, Microservices Architectures, Linux based OS (i.e., Fedora, Ubuntu, Debian), Robot Operating System (ROS)

Research Interests

Human Computer Interaction, Natural Language Processing, Robotics, Machine Learning, Computational Vision, eXplainable AI, Big Data, IoT, ITS, Industry 4.0

#### **Further Information**

#### **Conferences and Conventions**

July 2022 - Milan (IT)

CLIC 2021 (Eighth Italian Conference on Computational Linguistics)

November 2020 - Wuhan (CN) - (Virtual)

W2GIS 2020 (Web and Wireless Geographical Information Systems)

Co-Author of

Massive Spatio-Temporal Mobility Data: An Empirical Experience on Data Management Techniques

September-October 2020 -Isola di Ischia (IT) Co-Author of AVI 2020 (International Conference on Advanced Visual Interfaces)

An Haptic Interface for Industrial High-Precision Manufacturing Tasks

July 2020 - Copenaghen (DN) - (Virtual)

HCI International 2020 (22nd International Conference on Human-Computer Interaction)

Co-Author of

Acoustic Experiences for Cultural Heritage Sites: A Pilot Experiment on Spontaneous Visitors' Interest

June 2019 - Capri (IT)

WETICE 2019 (28th IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises)

Co-Author of

Industrial Internet of Things: Persistence for Time Series with NoSQL Databases

June 2019 - Krakow (PL)

MT-ITS 2019 (6th International Conference on Models and Technologies for Intelligent Transportation Systems)

Co-Author of

Investigating the Influence of On-Street Parking Guidance Strategies on Urban Mobility

#### **Prizes and Awards**

2022

Bachelor's degree special award in memory of Eng. Lucio Goglia, established by SADAS and University of Naples "Federico II"

Position

Supervisor and Mentor

Stuent

Giuseppe Liccardi

Thesis

Handling Massive Spatio-Temporal in a Hybrid Cloud-Fog Context

2019

Master's degree award in memory of Eng. Lucio Goglia, established by SADAS and University of Naples "Federico II"

Position Supervisor and Mentor

Stuent

supervisor and interi

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Luca Fiadone

**Thesis** 

Storage and retrieval of Time Series for Predictive Maintenance