europass Curriculum vitae

PERSONAL INFORMATION

Colangelo Federico

WORK EXPERIENCE

01/03/2017–Present

Teaching assistant - Communication security (Sicurezza delle telecomunicazioni)

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

01/03/2018–Present

Teaching assistant - Multimedia communications (Comunicazioni multimediali)

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

01/10/2018–Present

Teaching assistant - Communications fundamentals (Fondamenti di telecomunicazioni)

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

01/11/2014–31/12/2016

Team member - ISITEP project (FP7)

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

- Study of the Android operating system security model
- Threat analysis for mission-critical communications based on the TETRA/Tetrapol standards
- Development of a security model for mission-critical communication based on open source mobile operating systems

01/04/2015–31/12/2015

Team member - "Android Security" project

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

- Analysis of compatibility of Android-based terminals for mission-critical communications
- Evaluation of Android security mechanism for mission-critical communications

01/04/2015–31/12/2015

Team member - "Audio analysis for security and safety project"

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

- Design and development of machine learning algorithms for detection and classification of safety-critical audio events

23/05/2016–Present

Team member - ATENA project (H2020)

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

- Study of software-defined network-based architectures for critical infrastructure
- Design of software-defined security algorithms

14/05/2018–Present

Team member - RESISTO project (H2020)

Università degli studi Roma Tre, Dipartimento di Ingegneria, Rome (Italy)

- Threat models and taxonomies for the telecommunication industry
- Software-defined security algorithm for the telecommunication industry
- Network simulation and modelling for telecommunication infrastructures

EDUCATION AND TRAINING

01/10/2009–24/11/2012

Bachelor Degree in Electronic Engineering

EQF level 6

Università degli studi Roma Tre, Dipartimento di Ingegneria, Roma (Italy)

Thesis title:

"Progetto di sistemi di crittografia quantica basati su stati coerenti spettrali per trasmissioni in fibra ottica" - (Development of quantum cryptography systems based on coherent spectral states for optical fiber communications)

Topics covered:

- Programming
- Networking
- Electronics
- Signal Processing
- Circuit and Systems Theory
- Calculus
- Optical Communications
- Communication Theory

01/10/2012–24/10/2014

Master Degree in Telecommunications Engineering

EQF level 7

Università degli studi Roma Tre, Dipartimento di Ingegneria, Roma (Italy)

Thesis title:

"Progetto di meccanismi di sicurezza per reti SDN" - (Development of security algorithms for software-defined networks)

Topics covered:

- Advanced Coding
- Network Security
- Communication Systems
- Advanced Networking
- Software Security
- System Security
- Information Theory
- Multimedia Communication

01/11/2014–04/04/2018

PhD

EQF level 8

Università degli studi Roma Tre, Dipartimento di Ingegneria, Roma (Italy)

Thesis title:

"Semantic processing of multimedia data and applications"

Topics covered

- Android security
- Telecommunications security
- Networking security
- Data analysis
- Neural networks
- Audio signal processing
- Anomaly detection algorithms
- Software-defined networks

07/09/2015–11/09/2015

IEEE S3P summer school on signal processing 2015

University of Brescia, Brescia (Italy)

Topics:

- Graph signal processing

- Sparse signal processing
- Human-centric signal processing

14/03/2016–18/03/2016

Course "Reliability, availability and performance of data centers and clouds", prof. K. Trivedi

University of Pisa, Pisa (Italy)

Topics:

- Reliability and availability modeling
- Markov chains, Petri networks in performance with applications
- Software reliability

04/09/2016–10/09/2016

IEEE S3P summer school on signal processing 2016 - “Semantics in media”

University of Trento, Gruppo Telecomunicazioni e Tecnologie dell'Informazione, Trento (Italy)

Topics:

- Multimedia forensics
- Intelligent video processing systems
- Multimedia analysis and retrieval

04/09/2017–08/09/2017

IEEE S3P summer school on signal processing 2017 - “Signal processing meets deep learning”

Università degli Studi di Napoli Federico II, Gruppo Telecomunicazioni e Tecnologie dell'Informazione, Napoli (Italy)

Topics:

- Deep learning theory
- Image denoising, super-resolution
- Sparse representations and deep learning
- Visualization of deep neural networks
- Adversarial machine learning

PERSONAL SKILLS

Mother tongue(s): Italiano

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Inglese	C1	C2	C1	C1	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good communication skills acquired presenting at scientific conferences
- Team working experience acquired during my PhD and work on research projects

Organisational / managerial skills

- Good managerial skills acquired co-supervising bachelor and master students in the development of their thesis

Job-related skills

- Proficiency with Windows operating systems
- Proficient in the use of the Office Suite
- Advanced use of Unix Operating Systems
- Programming skills: C, C++, Html, Bash
- Advanced programming skills: C#, Java, Python
- Technical programming skills: Matlab, Mathematica, NumPy, Tensorflow, Pytorch
- Basic of microcontrollers programming
- Design and management of communication networks
- Assessment and management of network and operating system security
- Proficiency with machine learning algorithms: support vector machines, neural networks, clustering methods