

## Curriculum vitae

## PERSONAL INFORMATION Luca Zanella



Via Siberia, 75/C, 36015, Schio, Italy

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**G** github.com/LucaZanella

Gender Male | Date of birth 24/02/1995 | Nationality Italian

POSITION	Software Developer in Deep Learning for Visual Scene Analysis				
WORK EXPERIENCE					
March 2021 – March 2023	Software developer				
	Fondazione Bruno Kessler Via Sommarive, 18, 38123, Trento, Italy				
	E-mail eliricci@fbk.eu www.fbk.eu				
	<ul> <li>Design, development, and experimental validation of software tools and platforms for auto- matic analysis of video surveillance flows produced by multiple cameras</li> </ul>				
	Business or sector Deep Visual Learning				
March 2020 – September 2020	Master's student intern				
	Huawei Technologies Duesseldorf GmbH - European Research Center Riesstraße 25, 80992 München, Germany				
	E-mail stefano.bortoli@huawei.com www.huawei.eu				
	<ul> <li>Definition, implementation, and experimental validation of a method for automatically correct- ing road networks for microscopic traffic simulation utilizing features extracted from satellite imagery using TensorFlow and Detectron2</li> </ul>				
	<ul> <li>Development of a dashboard to monitor traffic optimization experiments analysis results using ELK Stack</li> </ul>				
	Business or sector Intelligent Cloud Technologies Laboratory				
February 2018 – July 2018	Bachelor's student intern				
	CBA Group Viale Trento, 56, 38068, Rovereto, Italy				
	E-mail annamaria.chiasera@cba.it www.cba.it				
	<ul> <li>Development of a client-server system to ingest data from distributed databases (electronic health records) to a centralized application for data quality monitoring using Spring Frame- work and PostgreSQL</li> </ul>				
	Business or sector Business Intelligence				
EDUCATION AND TRAINING					
September 2018 – March 2021	Master of Computer Science, 110/110 Cum laude				
	Department of Information Engineering and Computer Science, University of Trento, Italy				
September 2015 – October 2018	Bachelor of Computer Science, 110/110				
	Department of Information Engineering and Computer Science, University of Trento, Italy				
September 2009 – June 2014	Diploma di "Perito Ragioniere Programmatore", 94/100 I.T.C.G. Pasini, Schio, Italy				



PERSONAL SKILLS						
Mother tongue	Italian					
Other languages	UNDERSTANDING		SPEAKING		WRITING	
	Listening	Reading	Spoken interaction	Spoken production		
English	C1	C1	C1	C1	C1	
		: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user on European Framework of Reference for Languages			nt user	
Communication skills	<ul> <li>Proven teamwork skills acquired during the collaboration with international teams at FBK, Huawei, and CBA, and through the coordination of personal projects</li> <li>Teaching and communication skills acquired as tutor during activities at UniTN Summercamp 2019 aimed at high school students learning Python</li> </ul>					
Organisational / managerial skills	<ul> <li>Strong self-management and deadline management skills acquired during internships and project collaborations</li> </ul>					
Job-related skills	<ul> <li>Fluency in Python, C++, Java</li> <li>Good knowledge of Deep Learning and Machine Learning</li> <li>Good knowledge of Algorithms and Data Structures design</li> <li>Good knowledge of Evolutionary Algorithms</li> <li>Good knowledge of Windows and Linux operating systems</li> <li>Good knowledge of version control system Git</li> <li>Intermediate knowledge of PyTorch and basic knowledge of TensorFlow</li> <li>Intermediate knowledge of Spark</li> <li>Intermediate knowledge of Spin and nuXmv model checkers</li> <li>Intermediate knowledge of Repast Simphony and basic knowledge of Akka</li> <li>Basic knowledge of Formal Languages and Compilers</li> <li>Basic knowledge of front-end languages (HTML, CSS, JS)</li> </ul>					
Driving licence	В					
ADDITIONAL INFORMATION						
Projects	<ul> <li>Collaboration with Evolutionary Robotics and Artificial Life Lab (University of Trieste) for the implementation of:</li> <li>Covariance Matrix Adaptation Evolution Strategy in Java General Evolutionary Algorithm (jgea) for experimenting with Evolutionary Computation</li> <li>Lidar sensor and terrain with obstacles in 2D-VSR-Sim for experimenting with a 2-D version of the voxel-based soft robots (VSRs).</li> <li>Personal projects (see my GitHub):</li> <li>Atari 2600 RL agents, an autonomous agent trained to play Ms-Pacman, Atlantis and Demon Attack with human or super-human skill level using Reinforcement Learning techniques</li> <li>NYC Taxi Data, a detailed analysis using a Spark cluster of 300GB of data released by the NYC taxi and limousine commission</li> <li>Pedestrian Tracking, a detection-based algorithm for tracking pedestrians in a video taken from the MOT Challenge</li> <li>Soft Robots Evolution, a group of techniques for evolving voxel-based soft robots using evolutionary algorithms</li> </ul>					
Personal data	I hereby authorize the use of my personal data in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".					