

Stefano Fogarollo | Curriculum Vitae

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Quidquid latine dictum sit, altum sonatur

Education

Enrico Fermi

High school

Liceo Scientifico

Padova, IT
Sep 2009 - Jul 2014

Università degli Studi di Padova

BSc

Computer Science

Padova, IT
Oct 2015 - Jul 2019

TU Dresden

MSc

Computational Modeling and Simulation, Computational Life Sciences

Dresden, DE
Oct 2019 - Sep 2021

IGDT

PhD

Autonomus stereotactic thermal ablation

Innsbruck, Austria
Nov 2021 - ongoing

Bachelor thesis

Title: *Implementing IEC 60870-5-104 in XMonitor gateway*

Supervisors: Vittorio De Zuane (ThisOne!), Armir Bujari (Università degli Studi di Padova)

Abstract: Developing a GNU/Linux Qt-based app capable of collecting data via radio/modbus and broadcasting it to Monet via IEC 60870-5-104 protocol

MSc thesis

Title: *3D human pose estimation in the wild*

Supervisors: Edoardo Remelli and Sina Honari (EPFL), Bjoern Andres and Stefan Gumhold (TU Dresden)

Abstract: Current standard pipelines assume to have training data in the form of images, camera information, 3D annotations. Such information can be only retrieve in controlled settings and therefore current pipelines do not work well in the wild. The goal of this MSc thesis is to train a neural network based only on images + 2D pose information to learn camera information and 3D pose of the human in an unsupervised fashion. This allows the pipeline to work in the wild (where we don't have access to camera information).

Internship

Zucchetti

Software developer, UML robustness diagrams
Java, JavaScript (ECMAScript), MySQL, UML

Padova, IT
Apr 2018 - Jul 2018

ThisOne!

Software engineer, IOT, Industrial automation
C/C++, Lua, Qt, OpenWrt

Noventana, IT

Feb 2019 - Jun 2019

Amadeus IT Group SA

Software developer, departure control system
C/C++, ORACLE RDBMS

London, UK

Aug 2019 - Sep 2019

Work Experience

Atroos S.r.l.

Full-stack software developer, industry 4.0, predictive maintenance
Node.js, React, MongoDB

Noventana, IT

Oct 2018 - Aug 2019

Scuola Normale Superiore

Full-stack software developer, Cosmology Group
Python 2/3, Apache 2 on CentOS 6+, JupyterHub, Flask, React 15/16

Pisa, IT

Feb 2019 - Feb 2020

Compass Flight Instruments S.r.l.

Embedded software developer, free-flight instruments
C/C++, Embedded Linux, GTK+ 3, BlueZ

Castelfranco Veneto, IT

June 2019 - June 2020

Research

ZIH, TU Dresden

Software developer, HPC
C/C++ 11, Dash, OpenMPI, Fortran95

Dresden, DE

Jan 2020 - November 2020

MPI-CBG

Software developer, dynamic load balancing, Python-C++ bindings
C/C++ 11, OpenFPM

Dresden, DE

June 2020 - December 2021

BIOTEC, TU Dresden

Software engineer, COVID-19 AASD modeling
Matlab

Dresden, DE

April 2020 - July 2020

Groupe Weigert, EPFL

Research assistant, attention methods in image segmentation
Python 3, Keras

Lausanne, CH

October 2020 - March 2021

LPBS, EPFL

Research assistant, GANs for microscopy images
Python 3, PyTorch

Lausanne, CH

November 2020 - February 2021

CVLAB, EPFL

MSc thesis, 3D human pose estimation in the wild
Python 3, PyTorch

Lausanne, CH

February 2021 - September 2021

IGS, LFU

PhD, Autonomous stereotactic thermal ablation
Python 3, PyTorch

Innsbruck, Austria

November 2021 - ongoing

Teams

C.O.F.F.E.E.

Liceo Enrico Fermi Robotics Team
Physics I, Game Theory

Padova, IT

Sep 2013 - Feb 2014

Morpheus <i>Università degli Studi di Padova Rover Team, safety controller</i> C++, ROS	Padova, IT <i>Sep 2014 - Sep 2015</i>
Quartodilitro <i>Università degli Studi di Padova Motostudent Team, sensors, dashboard</i> Qt, C/C++, GNU/Linux	Padova, IT <i>Oct 2015 - Oct 2016</i>
Race UP <i>Università degli Studi di Padova FS Team, controlunit, web, CI</i> HTML & CSS & JS, Android 8, Python 2/3, Java, C/C++, Arduino	Padova, IT <i>Oct 2016 - Sep 2019</i>
Elbflorace <i>TU Dresden FS Team, target speed optimization in DV</i> C++, Python 2/3, ROS, Matlab	Dresden, DE <i>Oct 2019 - May 2020</i>

Individual competitions

National mathematics contest <i>Finalist</i>	Cesenatico, IT <i>May 2012</i>
Patavina Mathesis <i>5th</i>	Padova, IT <i>March 2013</i>
Patavina Mathesis <i>3rd ex-aequo</i>	Padova, IT <i>March 2014</i>
Regional physics contest <i>Bronze</i>	Padova, IT <i>April 2014</i>

Team competitions

National mathematics contest <i>Finalist</i>	Cesenatico, IT <i>2012 - 2014</i>
Zerorobotics <i>Winner</i>	Amsterdam, Netherlands <i>21 January 2014</i>
Motostudent IV Edition <i>3rd position</i>	Aragon, Spain <i>4-9 October 2016</i>
FSAE Italy <i>Winner</i>	Varano de' Melegari, IT <i>19-23 July 2017</i>
FSAE Italy <i>8th</i>	Varano de' Melegari, IT <i>11-15 July 2018</i>
FSAE Italy <i>7th</i>	Varano de' Melegari, IT <i>24-27 July 2019</i>
FSG <i>19th</i>	Hockenheimring, DE <i>5-11 August 2019</i>

Hackthons

Hack Unipd <i>POPUP</i> <i>Winner</i>	Padova, IT <i>20-21 June 2015</i>
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Hack Technogym*Gymtonic*

Finalist

Roncade, IT*17-18 October 2015***Droidcon***Doorbell*

Winner

Torino, IT*9-10 April 2016***NASA Space Apps***Design by nature***Vicenza, IT***20-21 October 2018***ESA Space your App***Mushy*

Winner

Padova, IT*24-26 October 2018***Hack Zurich***MeGrow***Zurich, CH***18-20 September 2020***Hack Zurich****Zurich, CH***24-26 September 2021***Porsche Digital Production Hackathon****Leipzig, DE***29 September - 1 October 2021*

Skills

Programming.....**C/C++:** 11, Qt**Android:** 7, Java**Python:** 2/3, SciPy, NumPy, Flask, Django, Express**Matlab:****JavaScript:** React, Node.js, MongoDB**Shell:** Bash, Zsh**Modeling frameworks**.....**Bayesian inference:** pyABC**Life sciences:** Morpheus**Particle methods:** OpenFPM**Engineering:** Simulink**Build tools**.....**GNU:** Make, CMake**Qt:** qmake**Software engineering**.....**VCS:** Git**Resource scheduling:** Gantt**Project management:** Redmine, Openproject, JIRA**Software development:** Agile**DevOps**.....**CI:** Bitbucket pipelines, GitLab jobs, Travis CI

Languages

Italiano: Professional working proficiency	<i>mother tongue</i>
English: Professional working proficiency	<i>B2, FCE</i>
Français: Limited working proficiency	<i>A1, DELF</i>
Deutsche: Limited proficiency	<i>A1, TUDIAS</i>

Interests

In no particular order, does not include everything

AI: Computer vision, reinforcement learning, SNN

Applied computer science: HPC

Applied mathematics: Trajectory optimization, cellular automata

Cooking: Panettone

Functions: TREE

Hardware: Neuromorphic computing

Mathematics: Number theory, integer series

Physics: Quantum information processing

Programming languages: Julia, Erlang, LISP, Haskell

Sports: running, swimming, skimo