Stefano Fogarollo | Curriculum Vitae

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Quidquid latine dictum sit, altum sonatur

Education

Enrico Fermi	**Padova, IT**
High school	*Sep 2009 - Jul 2014*
Liceo Scientifico	
Università degli Studi di Padova	**Padova, IT**
BSc	*Oct 2015 - Jul 2019*
Computer Science	
TU Dresden	**Dresden, DE**
MSc	*Oct 2019 - Sep 2021*
Computational Modeling and Simulation, Computational Life Sciences	
IGDT	**Innsbruck, Austria**
PhD	*Nov 2021 - ongoing*
Autonomus stereotactic thermal ablation	

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	**Padova, IT**
Software developer, UML robustness diagrams	*Apr 2018 - Jul 2018*
Java, JavaScript (ECMAScript), MySQL, UML	

ThisOne!   **Noventana, IT**
Software engineer, IOT, Industrial automation   *Feb 2019 - Jun 2019*
C/C++, Lua, Qt, OpenWrt

Amadeus IT Group SA   **London, UK**
Software developer, departure control system   *Aug 2019 - Sep 2019*
C/C++, ORACLE RDBMS

Work Experience

Atroos S.r.l.   **Noventana, IT**
Full-stack software developer, industry 4.0, predictive maintenance   *Oct 2018 - Aug 2019*
Node.js, React, MongoDB

Scuola Normale Superiore   **Pisa, IT**
Full-stack software developer, Cosmology Group   *Feb 2019 - Feb 2020*
Python 2/3, Apache 2 on CentOS 6+, JupyterHub, Flask, React 15/16

Compass Flight Instruments S.r.l.   **Castelfranco Veneto, IT**
Embedded software developer, free-flight instruments   *June 2019 - June 2020*
C/C++, Embedded Linux, GTK+ 3, BlueZ

Research

ZIH, TU Dresden   **Dresden, DE**
Software developer, HPC   *Jan 2020 - November 2020*
C/C++ 11, Dash, OpenMPI, Fortran95

MPI-CBG   **Dresden, DE**
Software developer, dynamic load balancing, Python-C++ bindings   *June 2020 - December 2021*
C/C++ 11, OpenFPM

BIOTEC, TU Dresden   **Dresden, DE**
Software engineer, COVID-19 AASD modeling   *April 2020 - July 2020*
Matlab

Groupe Weigert, EPFL   **Lausanne, CH**
Research assistant, attention methods in image segmentation   *October 2020 - March 2021*
Python 3, Keras

LPBS, EPFL   **Lausanne, CH**
Research assistant, GANs for microscopy images   *November 2020 - February 2021*
Python 3, PyTorch

CVLAB, EPFL   **Lausanne, CH**
MSc thesis, 3D human pose estimation in the wild   *February 2021 - September 2021*
Python 3, PyTorch

IGS, LFU   **Innsbruck, Austria**
PhD, Autonomous stereotactic thermal ablation   *November 2021 - ongoing*
Python 3, PyTorch

Teams

C.O.F.F.E.E.   **Padova, IT**
Liceo Enrico Fermi Robotics Team   *Sep 2013 - Feb 2014*
Physics I, Game Theory

Morpheus — **Padova, IT**
Università degli Studi di Padova Rover Team, safety controller — *Sep 2014 - Sep 2015*
C++, ROS

Quartodilitro — **Padova, IT**
Università degli Studi di Padova Motostudent Team, sensors, dashboard — *Oct 2015 - Oct 2016*
Qt, C/C++, GNU/Linux

Race UP — **Padova, IT**
Università degli Studi di Padova FS Team, controlunit, web, CI — *Oct 2016 - Sep 2019*
HTML & CSS & JS, Android 8, Python 2/3, Java, C/C++, Arduino

Elbflorace — **Dresden, DE**
TU Dresden FS Team, target speed optimization in DV — *Oct 2019 - May 2020*
C++, Python 2/3, ROS, Matlab

Individual competitions

National mathematics contest — **Cesenatico, IT**
Finalist — *May 2012*

Patavina Mathesis — **Padova, IT**
5th — *March 2013*

Patavina Mathesis — **Padova, IT**
3rd ex-aequo — *March 2014*

Regional physics contest — **Padova, IT**
Bronze — *April 2014*

Team competitions

National mathematics contest — **Cesenatico, IT**
Finalist — *2012 - 2014*

Zerorobotics — **Amsterdam, Netherlands**
Winner — *21 January 2014*

Motostudent IV Edition — **Aragon, Spain**
3rd position — *4-9 October 2016*

FSAE Italy — **Varano de' Melegari, IT**
Winner — *19-23 July 2017*

FSAE Italy — **Varano de' Melegari, IT**
8th — *11-15 July 2018*

FSAE Italy — **Varano de' Melegari, IT**
7th — *24-27 July 2019*

FSG — **Hockenheimring, DE**
19th — *5-11 August 2019*

Hackthons

Hack Unipd — **Padova, IT**
POPUP — *20-21 June 2015*
Winner

Hack Technogym	**Roncade, IT**
Gymtonic	*17-18 October 2015*
Finalist	
Droidcon	**Torino, IT**
Doorbell	*9-10 April 2016*
Winner	
NASA Space Apps	**Vicenza, IT**
Design by nature	*20-21 October 2018*
ESA Space your App	**Padova, IT**
Mushy	*24-26 October 2018*
Winner	
Hack Zurich	**Zurich, CH**
MeGrow	*18-20 September 2020*
Hack Zurich	**Zurich, CH**
TrackBuster	*24-26 September 2021*
Porsche Digital Production Hackathon	**Leipzig, DE**
WeCare	*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

Bayesan 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 *mother tongue*

English: Professional working proficiency *B2, FCE*

Français: Limited working proficiency *A1, DELF*

Deutsche: Limited proficiency *A1, TUDIAS*

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