

# Francesco Pezzuoli

## 1 Personal Data

## 2 Qualifications

### *PhD*

PhD in Mathematics and Applications (School of Science and Technology). University of Camerino, Camerino (Italy).  
Topic: Development of Gesture Recognition Algorithms Using Inertial Measurement Units (IMUs),  
Supervisor: Prof. Eng. Maria Letizia Corradini  
Started: November 2017.  
Date of degree: 29 march 2021.

### *MasterDegree*

Master Degree in Software and Systems for Industries 110/110 cum laude, University of Camerino, Camerino (Italy).  
Started: October 2015.  
Date of degree: May 2017  
Total: 18 months

### *BachelorDegree*

Bachelor Degree in Industrial Computing 110/110 cum laude University of Camerino, Ascoli Piceno (Italy).  
Thesis in: "Analysis, Study and Modeling a New Generation Exoskeleton for Support Using New Project's Technologies".  
Started: October 2011.  
Date of degree: July 2014  
Total: 32 months

### *Degree*

Expert chief technician in electronics and telecommunications *I.T.I. Enrico Fermi*, Ascoli Piceno (Italy). 91/100.

### *TeachingQualifications*

Aquired 24 credits (PF24) needed as requirements to be a professor in Italy, divided in:  
-Cognitive Processes, learning and development processes i learning [FIT002] (6CFU)  
-Anthropology [FIT003] (6CFU)  
-Design, evaluation and educational research [FIT001] (6CFU)  
-Teaching methods and technologies [FIT004] (6CFU)  
*University of Camerino, Camerino (Italy).*

### *Certificate*

Get Ready for Japan course  
*EU-Japan Centre for Industrial Cooperation: "https://www.eu-japan.eu", Japan*

### *Certificate*

Safety courses For Fire Fighting (medium risk) and First-Aid to People.  
*Alpha Consulting, Italy*

### **3 Current Work Experiences**

[February 2020/Actual]

Chairman of *LiMiX*, Innovative Start-up and Spin-off of the University of Camerino (Italy).

[A.Y 2019/2020]

Professor Adjunct in IOT and Principles of Physical Computing - Master Degree in Design for Digital Innovation, University of Camerino (Italy), 5 CFU

## 4 Ended Work Experiences

[March2015/February2020]

CEO and Founding Partner of *LiMiX*, Innovative Start-up and Spin-off of the University of Camerino (Italy). In *LiMiX* I carried out different hi-tech projects in different sectors: logistic, agri-food, virtual reality, fitness, rehabilitation and technology in marine environment

[3March2022]

Lecturer during Winter School: Management of Innovation and Common Good, Scuola di Studi Superiore Sant'Anna, Pisa, Italy

[21September2021]

Lecturer during Summer School: 3 European R2 S2 Robotic Rehabilitation Summer School 13-14-15/20-21-22/27 September 2021 Pediatric rehabilitation activities with the use of technologically advanced and robotic equipment, KOS HOLDING GROUP - SANTO STEFANO RIABILITAZIONE, Italy

[10September2021]

Lecturer during Summer School: IL BELLO DELL' INNOVAZIONE - trasferimento tecnologico, UNICAM, Camerino, Italy

[25September2019]

Lecturer during PhD Summer School (REP-EAT): Product Prototyping and service Definition, UNITE, Teramo, Italy

[22November2019]

Lecturer at C-LAB UNITE: Product Prototyping and Idea Validation, UNITE, Teramo, Italy

[23to27September2019]

Professor during SAAD Workshop Week, Generative Identity/Generative Graphics, UNICAM, Ascoli Piceno, Italy

[March2019/June2019]

Visiting Researcher - MDH University, Västerås (Sweden).

[2018/2019]

Improvements for a Battery Swap System (ROTOLion), Picchio Spa, Ancarano (TE), Italy.

[A.Y 2019/2020]

Professor Adjunct in Principles of IOT and Physical Computing - Master Degree in Design for Digital Innovation, University of Camerino (Italy)

[A.Y 2018/2019]

Professor Adjunct in ESA (Embedded Systems Architecture) - Master Degree in Computer Science, University of Camerino (Italy), 6 CFU

[2018]

Actor, Acting as Scientist in "Mission Possible" with Bret Roberts

[A.Y 2017/2018]

Professor Adjunct in ESA (Embedded Systems Architecture) - Master Degree in Computer Science, University of Camerino (Italy), 6 CFU

[November2013/January2014]

Developer for *MDH University and Västerås tidtagning*, Västerås (Sweden) Västerås Tidtagning provides timing equipment for swimming competition.

[November2010/June2011]

Computer Technician for *ADP Computer Store*, L'Aquila (Italy).  
Hw/Sw assistance, Data Recovery, Public Relations.

[March2009/May2009]

Stage for placement in "*G.E.M Elettronica*", San Benedetto Del Tronto Ascoli Piceno (Italy).

Wiring, Pre Testing, Testing, Welding.

## 5 Education and Research

- [2020] Recognition and Classification of Dynamic Hand Gestures by a Wearable Data-Glove  
Springer - SN Computer Science;  
Link: <https://link.springer.com/article/10.1007/s42979-020-00396-5>
- [2020] Development of a New Sign Language Translation System for People with Autism Spectrum Disorder  
Springer - Advances in Neurodevelopmental Disorders;  
Link: <https://link.springer.com/article/10.1007/s41252-020-00175-6>
- [2020] Dynamic Gestures Recognition through a Low-cost Data Glove  
Francesco Pezzuoli, Dario Corona, Maria Letizia Corradini  
School of Science and Technology, Mathematics Division  
IEEE ICHMS 2020
- [2019] Pezzuoli F., Corona D., Corradini M.L., Capriotti A.  
Talking Hands: a data-glove that helps non-verbal forms of communication  
ATAD Conference 2019, Rome (Italy), <https://www.atadconference2019.org>
- [2018] Pezzuoli F., Corona D., Corradini M.L., Cristofaro A.  
Development of a Wearable Device for Sign Language Translation.  
Published In: Ficuciello F., Ruggiero F., Finzi A. (eds) Human Friendly Robotics.  
Springer Proceedings in Advanced Robotics, vol 7. Springer, Cham (2018).
- [2018] Paciotti D, Pezzuoli F., Cotechini F. Upper limbs orthosis for disability support: the areas of project development between technology and design.  
Foritall, Ambient Assisted Living, Italian Forum, Lecce, July 2018.  
Published in: Lecture Notes In Electrical Engineering, Springer.
- [2019] 10th International Conference on Applied Human Factors and Ergonomics, Additive Manufacturing, Modeling Systems and 3D Prototyping, Washington D.C. USA, July 2019.  
"Improvements in a Wearable Device for Sign Language Translation"  
Published in: The book Advances in Human Factors in Wearable Technologies and Game Design (2019)
- [2017] 10th International Workshop on Human-Friendly Robotics (HFR 2017)  
Paper: "Development of a Wearable Device for Sign Language Translation".
- [A.Y.2021/2022] Supervisor. Master Thesis in Innovative Digital Design(LM-12) Unicam  
Student: Simone Lorenzo
- [A.Y.2021/2022] Supervisor. Master Thesis in Innovative Digital Design(LM-12) Unicam  
Student: Lerry Carlini
- [A.Y.2019/2020] Supervisor. Master Thesis in Computational Design (LM-12) Unicam  
"iRiseCoach" a device to help tennis players during tennis training sessions.  
Student: Marco De Luca

[A.Y.2019/2020]

Supervisor. Master Thesis in Computational Design (LM-12) Unicam  
Student: Michele Di Carlo

[A.Y.2019/2020]

Supervisor. Master Thesis in Computational Design (LM-12) Unicam  
Student: Lorenzo Gatti

[A.Y.2019/2020]

Supervisor. Master Thesis in Computational Design (LM-12) Unicam  
Student: Marco Chiappini

[A.Y.2017/2018]

Supervisor. Master Thesis in Computer Science (LM-18) Unicam  
"Wireless Sensor Networks for Rigid Multi-Link Structures".  
Student: Juzef Bici

[A.Y.2017/2018]

Supervisor. Master Thesis in Computational Design (LM-12) Unicam  
"Xela: VR, Serious Game e Tracker for hand rehabilitation".  
Student: Virginia D'Augusta

[A.Y.2016/2017]

Supervisor. Bachelor Degree Thesis in Computer Science (LM-31) Unicam  
"Implementation of an input device for person with motor disease".  
Student: Davide Sestili

## 6 Intellectual Property and Scholarships

[2019]

Inventor:

Patent Granted N. 102016000038807: "Conversion system in voice and / or written text of related movements in sign languages".

[2020]

Inventor:

Patent Pending N. 102020000006358: "Apparato di acquisizione di immagini di documentazione cartacea" an innovative project developed in collaboration with Tardini Srl.

[2016]

Author:

Copyright N. 2017002185: "Real Time Checking Algorithm For Gesture Recognition".

[A.Y.2014/2015]

Research Scholarship

"Contactless Connections and in continuity integrable with the release/coupling system for advanced bike sharing systems". Funded by *Picchio S.p.a. and University of Camerino*.

[A.Y.2012/2013]

Erasmus Student MDH University, Västerås (Sweden), 6 Months.

[A.Y.2012/2013]

Excellence Scholarship by University of Camerino.

Scholarship for Merit: Working 150h in the University, Support for the Secretary Office. Support to teachers, students, secretary, information system.

## 7 Languages

**English** Optimal Knowledge of the Language, Proficiency.  
**Italian** Native Language.

## 8 Computer Skills

Great attitude to work with all kind of technologies.

### **Operative Systems**

Optimal Knowledge of Microsoft Windows.  
Experience in assistance for all kind of PCs, Notebooks, Net books, Smart phones, Tablets ecc. (Software and Hardware).

### **Microsoft Office**

Optimal Knowledge of Microsoft Office Package.

### **Programming, Modeling and other Computer Skills**

*Assembler (MicroChip 16Fxx/18Fxx), Arduino and fast prototyping, C, C++, Csharp, Database, MySQL, SQL, SQL Server, Visual Studio, Java, ADT, Matlab, Simulink, Prolog, Software Engineering, UML, Enterprise Architect, Microsoft Project, Astah Professional, HyperWorks Packages, Creo 2.0 Packages, SolidWorks Packages, 3D VIA Composer, LaTeX, IMU (Inertial Measurement Unit) and Orientation Sensors, Quaternions, Professional 3D printing with Formlabs Fuse technology, Virtual Reality-Building Controllers and Hardware Device for Virtual/Augmented Reality*

## 9 Professional Skills

Great Attitude to Problem Solving  
Flexybile and adaptive  
Optimal Ability of Analysis

Hungry of Knowledge  
Diligent and Responsible  
Optimal Ability to Relate and Talk

## 10 Prizes/Grants/Other Activities

With the project Talking Hands (LiMiX Srl):

- 2022 Presenting his company inside "Italy: manufacturing beyond design" documentary during 9th Brazilian Industry Innovation Summit.
- 2020 Winner of a POR - FESR 2014 -2020 "Promotion of Research and Development in the sphere of smart specialization" in collaboration with LiMiX Srl, Jesi Lab and Acme Lab, project e-glove. Total funds (for all partners): 510.000
- 2020 SmartEES project funded by European Union (H2020). Total funds: 120.000
- 2020 ANGI National Prize (Premio Nazionale ANGI) National Association of Young Innovators
- 2019 TEDX Speaker-TEDx AUBG: Why I Use Technology to Help Others
- 2018 The Chivas Venture Global Finalist - 6th place
- 2018 Startup 3-days Acceleration Programme, Saïd Business School - University of Oxford
- 2017 Winner The Chivas Venture Italy
- 2017 Speech during "The Makers Week 2017" in Bruxelles EU Parliament.
- 2017 Invited as best practice at Global Education & Skill Forum, Dubai from Italian Ministry of Education, University and Research (MIUR)
- 2017 Winner of SME Instrument Phase I with LiMiX, Project Talking Hands. Total funds: 50.000
- 2017 Winner of a POR - FESR 2014 -2020 " Support for the development and consolidation of high-intensity start-ups and application of knowledge" with LiMiX Srl. Total funds: 150.000
- 2017 TEDX Speaker-TEDx Brescia: Breaking Barriers Using Technology
- 2015 Winner of Start Cup Marche. Total funds: 14.000
- 2016 Winner of e-Capital. Total funds: 20.000
- 2016 Winner of Maker Faire Rome: R.O.M.E Prize. Total funds: 100.000
- Public Engagement with Science and Technology, Performing Science communication in the mass media, Internet, radio and television programmes about my research
- Public Engagement with Entrepreneurship

## 11 Personal Interests

Travelling, Music and Movies, Motorcycle Enthusiast, Running, Swimming, Climbing, Karate (Teached to Children and Teenagers), Lecture, Help People - EX Blood Donor (Member of AVIS, Associazione Volontari Italiani donatori di Sangue, Italy).

## 12 Consent

I hereby consent to the processing of the data I provided in this CV. I declare my agreement with the data protection regulations in the data privacy statement.

To whom it may concern.

19/09/2022

PEZZUOLI FRANCESCO