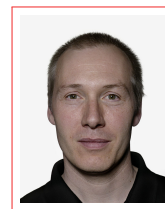


Gian Carlo Dozio

Curriculum Vitæ

☎ +41 58 666 65 03
✉ giancarlo.dozio@supsi.ch



Personal Informations

Name Gian Carlo
Surname Dozio
Citizenship Swiss
Phone ☎ ++41 58 666 65 03
E-mail ✉ giancarlo.dozio@supsi.ch

Languages

mother tongue **Italian**

	<u>German</u>	<u>English</u>	<u>French</u>	<u>Schwitzerdütsch</u>	<u>Portuguese</u>
Understand	Excellent	Excellent	Excellent	Excellent	Basic
Spoken	Excellent	Good	Excellent	Good	Basic
Written	Excellent	Good	Excellent		Basic

School Education

1983-1986 **University of Applied Sciences in electronics, EINEV**, Yverdon.
1980-1983 **Apprentice Radio Television eletrician, Scuola professionale**, Trevano.
1975-1980 **Secondary school, Istituto Elvetico**, Lugano.
1970-1975 **Primary school, Scuole comunali**, Lugano-Loreto.

Advanced Courses(selection)

Professional

2013 **Minergie A[®]: Advanced Course**, SUPSI, Trevano.
2010-11 **Accountancy: First level, FCPC**, Lugano.
2006 **Controllers design, Bachelor course**, SUPSI, Manno.
2004 **Advanced use of Java, Continuing education**, SUPSI, Manno.
2003 **Unified Modeling Language (UML), Continuing education**, SUPSI, Manno.
2002 **Introduction to Java and object-oriented programming, Continuing education**, SUPSI, Manno.
2001 **The object-oriented programming language C++, Continuing education**, SUPSI, Manno.
1990 **Electromagnetic compatibility, FAEL**, Zurich.
1989 **Working techniques, Zellweger**, Uster.
1988 **Methodical and didactical teaching, ABW**, Zurich.
1987 **Development of Switching power supplies, Unitrode**, Heidelberg (D).
1987 **Programming in PLM-86, Siemens**, Zurich.

Cultural

2008-2009 **Portuguese Courses, DFP**, Lugano.

1995-2000 **German courses**, *DFP*, Lugano.

1981-1982 **German courses**, *DFP*, Lugano.

Diplomas, certificates and awards

2015 **Premio Watt d'Or nella categoria Tecnologie energetiche con il progetto Gridsense**, *BFE*, Berna.

2013 **Certificate of participation of Minergie A[®]: Advanced course**, *SUPSI*, Trevano.

2011 **Diploma of accountancy: Level 1**, *FCPC*, Lugano.

2010 **SUPSI Teaching Certificate Diploma**, *SUPSI*, Manno.

1982-2010 **Certificates of various courses**.

1999 **German Diploma: Zentrale Mittelstufenprüfung**, *Goethe Institut*, Lugano.

1992 **International Diving Certificate, First Degree**, *SUSV*, Zurigo.

1986 **BBC Award for outstanding dissertation**, *BBC*, Yverdon.

1986 **EINEV Award for the best exams results**, *EINEV*, Yverdon.

1986 **Diploma in Electronic Engineer ETS in industrial electronics**, *EINEV*, Yverdon.

1983 **AFC: Electrician in radio and television**, *DFP*, Trevano.

1980 **Secondary school Diploma**, *DS*, Lugano.

Working Experiences

from 2000 **Lecturer/Researcher**, *SUPSI DTI, ISEA Institute, SMT laboratory*, Manno.

from 2014 **Chief Expert for the multimedia-electronics school**, *SAMT*, Trevano.

from 2014 **Expert for exams in multimedia-electronics**, *SAMT*, Trevano.

from 2014 **Math teacher for preparatory courses of examinations for the access of professional maturity**, *SPAI*, Locarno.

from 2010 **Member of the jury for the Swiss Engineering Prize for the SUPSI-DTI, SUSPI DTI, Swiss Engineering Ticino**, Manno.

from 2010 **ISEA representative on the committee of the DTI college department's**, *SUPSI DTI*, Manno.

from 2008 **External expert for the evaluation of innovative projects**, *Cantonal Office of Promotion and Consultancy*, Bellinzona.

2007-2009 **Strategic Direction**, *SD Stenio Dozio SA*, Lugano.

from 2005 **SUPSI Contact person for Electrosuisse (Swiss association of electricians)**, *SUPSI DTI*, Manno.

2004-2008 **Head of electronic services Unit**, *SUPSI DTI*, Manno.

2001-2009 **SUPSI Representative in the Edison competence network now SwissT.Net**, *SUPSI DTI*, Manno.

1995-2008 **Part-time translator: translation of texts from German into Italian**, *Various companies*, Swiss-german.

1999-2000 **Customer advisor, Marketing, Design Consultant of electronic hardware**, *Stenio Dozio*, Lugano.

1996-1999 **HW Designer, Project Manager, responsible for HW design, Head of Technical Department**, *Techselesta Engineering SA*, Cadempino.

1995-1996 **Customer advisor, Marketing**, *Stenio Dozio*, Lugano.

1992-1995 **Cultural and linguistic journey abroad**, Asia, Australia, New Zealand, USA.

1986-1992 **HW and SW Designer, since 1990 Project Designer**, *Zellweger Uster AG*, Uster.

Teaching experiences

- from 2013 **Lecturer in Mathematics at the preparatory courses for admission to the CPQ-MPA / MPT, SPAI, Trevano.**
- from 2001 **Lecturer researcher at SUPSI. Lesons: Digital-technique, power electronics, structured programming, SUPSI, Manno.**
- 1988-1992 **Lecturer in electronics (in German language), ABW e ST, varie città svizzerotedesche.**

Acquired skills and competences

Technical skills and competences

Software Design

- OS Linux, Windows, On-Time
- Program-
ming
languages C, C++, JAVA, Pascal, PLM86, Assembler86, HTML, XML, ASN.1

Hardware Design

- Digital circuits with microprocessors, analog circuits, analog and digital filters, power electronics, switching power supplies, fieldbus systems, ultra low power systems, control of piezoelectric systems for micro and nano positioning, electromagnetic compatibility.
- Regulations Knowledge of the major safety and electromagnetical compatibility regulations.
- Reliability Circuits design according to the theories of reliability.

Tools

- Computatio-
nal Matlab/Simulink
- Simulation SwitcherCAD III, Tina
- ECAD P-CAD e ALTIUM DESIGNER
- Editor L^AT_EX Microsoft Office, Visio, Vim
- Embedded
Platforms DSP Texas, Code Composer Studio
Freescale, Code Warrior,
ATMEL AVR,
Codevision AVR, DALLAS TINI, JDK
LonWorks, Nodebuilder

Project Management

Project's acquisition and founds request, Feasibility study, Analysis and requirements specification, Risk Analysis, Design, Purchasing management, Quality Management, Project documentation management, Test Planning, Redesign, Know-how Transfer

Fields of application

Textile, Medical, Industrial, Building and home automation, Smart Home, Ambient Assisted Living (AAL), Smart Grid, Energy harvesting, Access control, Precision positioning

Teaching skills and competences

- 1986-2009 See teaching portfolio

Social skills and competences

I'm able to relate with people of different nationalities, culture and language, experience gained from the activities in German-speaking Switzerland and in the two years of living abroad where I could compare myself with different cultures, religions and ways of life and thought completely different from ours. Even when I was confronted languages not understandable to me, I was able to establish a contact to achieve an exchange of information.

Organisational skills and competences

I am able to independently organize work, setting goals and priorities. I lead projects by clearly defining the objectives, properly assigning priorities and resources. Skills acquired over the years in my work experience.

I'm able to handle stressful situations always with a properly and efficiently relation with co-workers and colleagues.

My work experiences have led me to lead teams of people both technical and administrative.

Publications

- 2015 **HAC: Hardware design for a Smart-Home and Smart-Grid decentralised load management system**, *Armando Rivero, Andrea Bernaschina, Davide Rivola, Vasco Medici, Gianluca Montù, Gian Carlo Dozio*, 24th International Symposium on Industrial Electronics (ISIE) IEEE 2015, Buzios Brasil.
- 2014 **suisMOTE: A novel Ultra Low Power ARM based sensor for IEEE 802.15.4 Wireless Sensor Networks**, *Armando Rivero, Andrea Bernaschina, Gian Carlo Dozio*, ANDESCON, Conferencia Técnica y Científica bianual del Consejo Andino del IEEE, Cochabamba, Bolivia.
- 2010 **High-precision control system for piezoelectric stack actuators**, *Gianluca Montù, Gian Carlo Dozio, Silvano Balemi*, Euspen-European society for precision engineering and nanotechnology.
- 2008 **High-performance amplifier for stick-slip piezoelectric motors**, *Gianluca Montù, Gian Carlo Dozio, Ridha Ben Mrad, Silvano Balemi*, Euspen-European society for precision engineering and nanotechnology.

Patents

- 2013 **Method for recharging an accumulator of an electric vehicle**, *Applicant: Alpiq InTec AG, Inventors: Giusti Alessandro, Salani Matteo, Rizzoli Andrea, Gambar-della Luca, Dozio Gian Carlo, Foletti Fabio, Rivola Davide, Rudel Roman, Piffaretti Marco, Gabba Giorgio*, Application No/ Patent No: 13181909.6-1806.

Speeches at conferences (selection)

- 2013 **ICT and Home Automation to assist elderly and impaired peoples**, *Ticino Case Expo*.
- 2013 **Gérontotechnologies: Évolutions et impacts sur les pratiques professionnelles de l'aide et des soins à domicile**, *ARBT: Bussigny-près-Lausanne*, Other speakers: SUPSI: Laura Bertini.
- 2010 **Economy - Energy Efficiency - Evolution: Forecast and opportunities in the electrical branch**, *Infocentro ALPTRANSIT*, Other speakers: SUPSI/USI: Siegfried Alberton, UACER: Jody Trinkler.
- 2009 **Society, Health and Technology: The reality is the future**, *Lugano Communication Forum*, Other speakers: SUPSI: Riccardo Crivelli, Silvia Giordano, Andrea Cavicchioli. STAC: Fabrizio Greco.
- 2009 **Environmental Security - Wireless Sensor Networks: From environmental disasters to toxic gases**, *Ticino Informatica*, Other speakers: Enveve SA: Marco Brini, CEO, POLITO: Luca Marmo, Ricercatore Confermato del Dipartimento di Scienza dei Materiali e Ingegneria Chimica.

Participation in projects (selection)

- 2016 **Sabik2: Design of a universal anti-intrusion system for fences,**
Task being performed: Project coordinator, HW and FW Design, Partners: SUPSI: DTI, Fratelli Albertoli, Gruppo Sicurezza, Flextron AG, Powerline Automation.
- 2015 **SoloGrid: Energy meter data acquisition system,**
Task being performed: SMT Project coordinator, HW and FW Design, Partners: SUPSI: DTI, Alpiq, Landis

Gyr, BFE.

- 2014 **Sabik: Universal anti-intrusion system for fences: Feasibility study,**
Task being performed: Project coordinator, Partners: SUPSI: DTI, DEASS, Fratelli Albertoli,.
- 2014 **Gridsense: Design of a intelligent Energy control system (Gridsense) for smart living,**
Task being performed: SMT Project coordinator, HW and FW Design, Partners: SUPSI: DTI, DACD. Alpiq.
- 2013 **HCD2: Design of a intelligent Home Charge Device (HCD) for electric vehicle,**
Task being performed: SMT Project coordinator, HW Design, Partners: SUPSI: DTI, DACD. Protoscar.
- 2011 **ON-THE-BED: Proximity detector for activity monitoring of hospital staff,**
Task being performed: SMT Project coordinator, HW and FW Design, Partners: SUPSI: DTI. Clinica Luganese.
- 2011 **S2G: Optimal Power-grid management through a new concept of Smart-Grid (intelligent network management),**
Task being performed: SMT Project coordinator, HW and FW Design, Partners: SUPSI: DTI, DACD, DSAS. Powerline Automation. AIM. Bacher Energie AG Baden.
- 2010 **GRANNO: Home Automation for elderly and/or impaired people,**
Task being performed: Project leader, Partners: SUPSI: DTI, DSAN, DACD, DSAS. STAC. Città di Lugano. SCUDO.
- 2010 **IDA: ICT to assist elderly and impaired people,**
Task being performed: Project leader DTI, Partners: Internal SUPSI Project: DTI-DSAN-DSAS.
- 2009 **COABITAN-Ti: Concept of senior housing in Ticino(CH),**
Task being performed: Analysis of possible home automation solutions to use in apartments for the elderly and/or impaired people, Partners: SUPSI: DTI, DACD, DSAN DSAS. ATISA.
- 2009 **DUBS: Decubitus Ulcer Prevention System,**
Task being performed: Electronic System Design e HW Design, Partners: SUPSI: DTI. Algotek Sagl.
- 2009 **DIAG-SSC: Diagnostic system for SSC systems with limited energy for LON powerline,**
Task being performed: Project leader, MEP HW Design, Partners: SUPSI:DTI. SYSNET Telematica.
- 2009 **SMART-GRID: Analysis for a decentralized management of the grid,**
Task being performed: System, HW and SW design, Partners: SUPSI: DTI, DACD.
- 2008 **MPVT: Multi-Purpose PV Module Tester,**
Task being performed: HW Design, Partners: SUPSI: DTI, DACD. Pasan.
- 2008 **EIT: Electrical Impedance Tomography,**
Task being performed: Sensor Design, Partners: SUPSI, CSEM Landquart.

- 2007 **SensorBee: Design of a self-configuring and self-powered wireless node for home automation,**
Task being performed: Project leader, Theoretical analysis and simulation of possible sources of energy, HW Design, Partners: SUPSI, Powerline Automation, Marlanvil Spa (I).
- 2006 **MGSwitch: Solid State AC Switch,**
Task being performed: HW and SW Design, Partners: SUPSI, MG Engineering.
- 2006 **SINCOS-CPCI: CPCI card for SINCOS signals acquisition,**
Task being performed: Project Management, HW Design, Partners: Internal SUPSI Project DTI-SMT.
- 2006 **SINCOS-DRIVER: CPCI card to drive linear motors,**
Task being performed: Project Management, HW Design, Partners: Internal SUPSI Project DTI-SMT.
- 2005 **FastDrive: Control of step-motors,**
Task being performed: SW Design, Partners: SUPSI, Metallux.
- 2004 **Piezo: Driver for piezoelectric actuators with a capacity of up to 5 nF,**
Task being performed: conception and realization of electronics and control software for stack and steck-sleep motors , Partners: SUPSI, EPFL.
- 2004 **SISIA: Surface Inspection System for Industrial Applications,**
Task being performed: Linux RTAI SW Driver and DSP SW Design, Partners: SUPSI, EPFL, Mecartex, AGIE.
- 2003 **CREME: Distributed and remote control for professional audio equipment,**
Task being performed: Communication protocol design between GUI and audio system, Partners: SUPSI, Mandozzi Elettronica.
- 2002 **VoLON: Design of a system for the voice transmission through the digital LONWorks network,**
Task being performed: Project Management, HW Design, Partners: SUPSI, Soltec Sagl.
- 2000 **ATMMIX: Bi-directional ATM-Audio Interface,**
Task being performed: Design of the ATM protocol-stack on x86 Platform with On-Time OS, Partners: SUPSI, Mandozzi Elettronica.

Hobby e interests

Committee member of FTIA, Federazione Ticinese Integrazione Andicap, Giubiasco.

Greenpeace, Switzerland.

Committee member of AGCB, Breganzona, 2003-2008.

Secretary and committee member of the Aqueduct Association Garmagnunach Monte di Sotto, Malvaglia.

Vice President of the Ticino section of USAQ Association: Swiss Union of Automation and Switchboards, Lugano.

Sport **Athletics, swimming, cycling, triathlon.**

Hobby **Collection of antique radio, photography.**

Interests **renewable energies.**

References (in alphabetical order)

Prof. Giuseppe Andreoni, PhD, *Professor at Politecnico di Milano, responsible for the CAMPUS of Lecco, Lecco Sensibilab laboratory and laboratory LyPhe in Milan,*
POLIMI INDIACO, I-20158 Milano.

☎ +39 02 2399 8881
✉ giuseppe.andreoni@polimi.it

Dr. sc. techn. Josef X. Brunner, *CEO of Swisstom Swisstom AG, CH-7302 Landquart.*

☎ +41 81 330 0974
✉ jxb@swisstom.com

Dr. Silvio Colombi PhD, *Head of Development GE Consumer & Industrial SA, CH-6595 Riazzino.*

☎ +41 91 850 51 51
✉ silvio.colombi@ge.com

Avv. Giorgio Grandini, *President of STAC STAC, CH-6900 Lugano.*

☎ +41 91 913 67 00
✉ info@grandiniscolari.ch

Fabrizio Greco, *Director of STAC STAC, CH-6900 Lugano.*

☎ +41 91 913 67 00
✉ info@stac-prociechi.ch

Prof. Alex Klapproth, *Director of the CEESAR Competence Center Hochschule Luzern, CH-6048 Horw .*

☎ +41 41 349 35 12
✉ alexander.klapproth@hslu.ch

Prof. Thomas Müller, *Director of the institute for embedded systems in the SUP of Winterthur ZHAW, CH-8400 Winterthur.*

☎ +41 58 934 75 09
✉ thomas.mueller@zhaw.ch

Hugo Wyss, Phys. Dipl. ETHZ, *Life Senior Member IEEE Life Alumnus Stanford Grad. Business School, Palo Alto, CA Corporate Development Manager, FEMTO SA, 2503 Biel.*

☎ +41 32 366 70 20
✉ h.wyss@ieee.org

Processing of CV informations

Processing agreement of personal data
The undersigned authorizes the processing of personal data contained in this Curriculum Vitæ according to the LPD, Federal Law on Data Protection and relative Ordinance, N.235.1 of 19 June 1992

Acronyms (in alphabetical order)

ABW **Arbeitsgemeinschaft für berufliche Weiterbildung in der Metallindustrie.**
AFC **Attestato Federale di Capacità.**
AGCB **Assemblea dei Genitori del Comprensorio di Breganzona.**
AIM **Aziende industriali di Mendrisio.**

ARBT Association romande de biotélevigilance.
BBC Brown Boveri Company.
CEESAR Swiss Research Center for Building Intelligence.
CES Comitato elettronico svizzero.
CSEM Centre Suisse d'Électronique et de Microtechnique.
DACD Dipartimento Ambiente Costruzioni e Design.
DFP Divisione della formazione professionale.
DS Divisione della scuola.
DSAN Dipartimento SANità.
DSAS Dipartimento Scienze Aziendali e Sociali.
DTI Dipartimento Tecnologie Innovative.
EDiSoN Embedded and Distributed Solution Network.
EINEV École d'Ingenieurs de l'État de Vaud.
EPFL École Polytechnique Fédérale de Lausanne.
ETS École Technique Supérieure.
FAEL Fachgruppe Elektronik und industrielle Informatik.
FCPC Fondazione Centro di Perfezionamento Professionale.
ISAAC Istituto Sostenibilità Applicata all'Ambiente Costruito.
INDIACO Industrial Design, Arts, Communication and Fashion.
ISEA Istituto Sistemi e Elettronica Applicata.
LyPhe Laboratory of Physical Ergonomics.
POLIMI Politecnico di Milano.
POLITO Politecnico di Torino.
SAMT Scuola Arti e Mestieri Trevano.
Sensilab Laboratory of Biomedical Sensors and Systems.
SCUDO Servizio Cure a Domicilio.
SMT Laboratorio di sistemi mecatronici.
SPAI Scuola Professionale Artigianale ed Industriale.
ST Scuola tecnica.
STAC Società Ticinese per l'Assistenza dei Ciechi.
SUPSI Scuola Universitaria Professionale della Svizzera Italiana.
SUSV Schweizer Unterwasser-Sport-Verband.
UACER Ufficio dell'aria del clima e delle energie rinnovabili.
ZHAW Zürcher Hochschule für Angewandte Wissenschaften.