

# CURRICULUMVITAE

Institute  
Information Systems

Prof. Dominique Genoud



## Contact

<b>Title</b>	Prof. Dr. Ing. Dipl EPFL en microtechnique
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## Biography

Dominique Genoud studied at the Federal institute of Technology in Lausanne Switzerland (EPFL), he then worked in different places in Switzerland as Software and hardware engineer. From 1995 to 1999 he was researcher at IDIAP Switzerland in voice recognition and biometrics systems where he obtained his PhD thesis in Information systems.

In 1999 he made a postdoctoral at ICSI UC Berkeley. From 1999 to 2002 he worked as senior research engineer at Nuance Communications in Menlo Park California. Dominique Genoud has several international publications (articles, books and patents) in the fields of biometrics and data analysis systems, etc.

From 2002 to 2006 he worked as manager at Polyright, a Swiss company active in software products for RFID solutions. Since 2006 he is CEO of Loutze-informatique.com, a software company that he founded. He joined the software engineering unit of the Business Information Systems Institute at HES-SO Valais in 2010. Dominique current research activities are focused on information systems for energy (smart-grids/micro-grids) and multisource intelligent data analysis applied in domain such as biotechnology, pharama and energy.

## Research Interest

Intelligent data analysis, data mining, machine learning, Business intelligence, smart information systems, information systems for energy.

## Skills

Computer science for data intelligence and machine learning, Software management (development, production, maintenance), project management (standard and agile).

## Education

- 1999 **PhD in technical science (computer science)**  
Federal Institute of Technology of Lausanne (EPFL), Switzerland
- 1992 **Postgraduate certificate in biological and artificial neural networks**  
Federal Institute of Technology of Lausanne (EPFL), Switzerland
- 1989 **Engineering Diploma of EPFL (Microtechnic)**  
Federal Institute of Technology of Lausanne (EPFL), Switzerland

## Experience

- Since 2010 **HES-SO Valais, Sierre, Switzerland**  
Position as full professor in computer science
- Since 2006 **Loutze-informatique, Chamoson, Switzerland**  
CEO and owner
- 2002 – 2006 **Polyright SA, Sion, Switzerland**  
AQ and IT manager, member of the steering board.
- 1999 – 2002 **Nuance Communications, Menlo Park, California, USA**  
Senior research&software engineer in the speech domain
- 1999 **ICSI, University of California Berkeley, USA**  
Postdoctoral position in speech recognition
- 1995 – 1999 **IDIAP, Martigny, Switzerland**  
PhD student in speaker recognition voice transformation domain
- 1994 – 1995 **IDIAP, Martigny, Switzerland**  
Research engineer in speaker recognition
- 1993 – 1994 **Round the world trip**

- 1992 – **CIMTEC, Sion, Switzerland**  
1993 Project leader in Quality insurance, IT manager
- 1991 – **Ecole d'ingénieurs du Valais, Sion, Switzerland**  
1992 Project leader precision measurement systems
- 1989 – **Nagra-Kudelski, Cheseaux, Switzerland**  
1991 Software and hardware developer for digital tape recorder

## Projects (small selection)

- 2011 – **IoT6 (FP7)**  
2014 Ipv6 protocol for Internet of Things
- 2011 – **MDIS (RCSO)**  
2013 Multi-source Data Intelligence Services
- 2011 – **Sensimed (CTI)**  
2012 Glaucoma information system
- 2011 – **E-ICT**  
2012 Intelligent information system for energy in the buildings
- 2012 – **Sensimed diagnosis (CTI)**  
2013 Advanced signal analysis technologies for the early detection of glaucoma
- 2012 – **iBATS (The Ark energy)**  
2013 Intelligent information system for electrical micro-grids
- 2012 – **Protein folding analyzer (HESSO)**  
2013 Information system to store, analyze and visualize data from protein folding

## Teaching activities – Courses

- Since 2010 **Information system development (Bachelor HES-SO)**  
Handling modern frameworks and software development platforms for the information systems
- Since 2010 **Object oriented software development (Bachelor HES-SO)**  
Object oriented concepts using java language
- Since 2011 **Distributed programming (Bachelor HES-SO)**  
Concepts of distributed programming
- Since 2011 **Agile software development management (Bachelor HES-SO)**  
Agile methods applied to the professional development
- Since 2011 **Advanced data management (Bachelor HES-SO)**  
Data mining, intelligent software analysis inserted in the information system

## Publications – Journal articles

Selection, all publications available from <http://publications.hevs.ch>

- 2005 **Update in bioinformatics: Toward a digital database of plant cell signalling networks: advantages, limitations and predictive aspects of the digital model**  
[G05 ]Trevino santa Cruz Marcela Beatriz, Genoud Dominique , Metraux Jean-Pierre , Genoud Thierry, " , Journal of Phytochemistry ISSN 0031-9422, 2005, vol. 66, no3, pp. 267-276 [10 page(s) (article)] (1 p.1/2)
- 1998 **An overview of the CAVE project research activities in speaker verification**  
*submitted to SpeechCom journal, 1998.*  
(with F.Bimbot, M.Blomberg, L.Boves, H.P.Hutter, C.Jaboulet, J.Koolwaaij, J.Lindberg and J.B.Pierrot)
- 1998 **Polycost: a telephone-speech database for speaker recognition,**  
*submitted to SpeechCom journal, 1998.*  
(with D.Petrovska, J.Henneberg, and H. Melin)
- 1997 **Acoustic-Labial Speaker Verification**  
*in Pattern Recognition Letters, 18:9, pp 853-858, 1997.*  
(with P.Jourlin, J.Luettin and H.Wassner)

## Publications – Conference and workshop papers

Selection, all publications available from <http://publications.hevs.ch>

- 2012      **Demand forecasting and smart devices as building blocks of smart micro grids**  
René Schumann, Dominique Genoud  
To appear in IEEE International Workshop on Extending Seamlessly to the Internet of Things (esIoT'12), IMIS-2012 conference, Palermo, Italy
- 2002      **Combining speaker and speech recognition systems**  
With L.Heck, *In proc of ICSLP 2002*, Denver Co, 2002.
- 2001      **Integrating Speaker and Speech Recognizers: Automatic Identity Claim Capture for Speaker Verification**  
With L.Heck, in IEEE, *A Speaker Odyssey The Speaker Recognition Workshop*, Crete, 2001.
- 1999      **Client/world model synchronous alignment for speaker verification,**  
with J.Mariethoz, F.Bimbot and C.Mokbel  
*in proc of EUROSPEECH-99*, Budapest, 1999.
- 1999      **Deliberate imposture: a challenge for automatic speaker verification systems.**  
with G.Chollet  
*in proc of EUROSPEECH-99*, Budapest, 1999.
- 1998      **Speech pre-processing against intentional imposture in speaker recognition**  
With G.Chollet  
*in proc. of ICSLP-98*, Sidney, 1998.