## Contact data

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**Biography** Riccardo Bernardini graduated in 1990 in Electronic Engineering at the University of Padova (Italy) with a final score of 107/110. He got his **PhD** in Electrical Engineering and Information Theory in 1995 at the University of Padova (*Fast Algorithms for Multidimensional Signal Processing*).

|           | Date         | Employer             | Position                            |  |
|-----------|--------------|----------------------|-------------------------------------|--|
|           | 2001-current | University of Udine  | Aggregate Professor                 |  |
|           | 1997 - 2001  | University of Padova | Contract researcher                 |  |
|           | 1996 - 1997  | EPFL (CH)            | Postdoctoral Fellow (with           |  |
| Employers |              |                      | Prof. Martin Vetterli)              |  |
|           | 1994 - 1995  | AT&T Bell-Labs       | Visiting Scientist (with Dr. Jelena |  |
|           |              |                      | Kovačević)                          |  |
|           | 1992 - 1995  | University of Padova | PhD student                         |  |
|           | 1990 - 1991  | University of Padova | Graduate Research Assistant         |  |

Teaching activities He teaches/has taught courses on

- Signal theory (University of Udine)
- Digital signal processing (University of Udine)
- Advanced digital signal processing, filter banks, wavelets and coding. (University of Udine)
- Didactic Laboratory of Information Engineering (University of Udine)
- Metodi avanzati in ingegneria elettronica e delle comunicazioni for the Scuola superiore (2019)
- Applied cryptography at the FOURTH TRAINING SCHOOL on PROTOTYP-ING, TESTBEDS and IPR, (March 2018, Bristol UK)
- Geometry-based optimization methods for engineerin PhD course (2016)
- Discrete events simulation PhD course (2015)
- Discrete events simulation PhD course (2014)

**Research activities** His main interests are in the field of digital signal processing. More into detail, his main fields of research are filter banks, distribute coding, multiple description coding, streaming over peer-to-peer networks, cryptographically strong hardware random number generators and physically unclonable constants, processing of biological signals (e.g., ECG), chipless RFID.

**H-index** (on 2nd April 2020): 11 (according to Scopus), 16 (according to Google Scholar).

| N. Indicatore | 1 | 2   | 3 |
|---------------|---|-----|---|
| Valore        | 9 | 272 | 6 |
| Soglia        | 9 | 200 | 8 |

## Other activities

- He has been editor for the editorial project Cryptography by IntechOpen
- He is **reviewer** for several international scientific magazines (among them: *IEEE Trans. on Signal Processing, IEEE Trans. on Circuits and Systems, IEEE Trans. on Image Processing*)
- He has been reviewer for national funding programs PRIN and FIRB
- He hs been **associated editor** for *IEEE Trans. on Circuits and Systems for video technology.*
- He was **coordinator** of the *SourceForge* **project** *Corallo* (an implementation of PPETP, the P2P transport protocol developed at the University of Udine)
- He was/is among the organizers of the workshops/meetings
  - GTTI MMSP 2020
  - GTTI Meeting 2018
  - GTTI MMSP 2014
  - STreaming Day 2010
- He has been involved in research projects

2022 PRIN 2022, project QT-SEED (National coordinator)

- $2019 \ {\rm Display4Ships}$
- $2011 \ {\rm Barcotica}$
- 2011 European Researchers' Night 2011.
- ${\bf 2008} \ \ {\rm Arachne: \ Advanced \ video \ streaming \ techniques \ for \ peer- \ to-peer \ networks}$
- $2008 \ {\rm Omega} \ ({\rm power-line} \ {\rm communications})$
- ${\bf 2005} \ {\rm Trasmissione} \ {\rm multimediale} \ {\rm affidabile} \ {\rm su} \ {\rm reti} \ {\rm non} \ {\rm affidabili}: \ {\rm tecniche} \ {\rm evolute} \ {\rm di} \ {\rm codifica} \ {\rm sorgente}/{\rm canale}$
- $\mathbf{2003} \ \operatorname{Regional Project}"\operatorname{TechUP"}$
- 2003 European Project "WireNet"
- **1999** Analisi, sintesi e indicizzazione di sequenze audio/video nella comunicazione multimediale,
- 1999 European Project IST-1999-20859 Metavision
- 1998 Ambienti avanzati per comunicazioni a pacchetto,
- **1997** Comunicazione multimediale: analisi di contenuto, modellamento, accesso e protezione dell'informazione,
- **1995** Elaborazione e codifica di segnali per sistemi multimediali di telecomunicazione,
- **1996** Elaborazione e codifica di segnali per sistemi multimediali di telecomunicazione,
- 1997 Comunicazione video in ambito radio-mobile,
- 1997 Ambienti avanzati per comunicazioni a pacchetto,
- 1996 Progetto di un codificatore video a basso bit rate,
- 1995 Progettazione di un sistema di comunicazione video a bassissimo bit-rate,
- He has been member of the *Didactic commission* for the *electronic engineering* CCS
- He has been the University of Udine reference for the European initiatives Eposs and NetWorld 2020
- He is currently the UNIUD representative in CNIT (*National Inter-University* Consortium for Telecommunications)

**IT experience** He has good experience with Unix-like operative systems (especially Linux) and with several languages, among which: Ada, C, C++, Tcl/Tk, Perl, PHP, Ruby, HTML, XML, Matlab, PostScript.

The list of publications is available on IRIS.