



Biennial since 1998

CSNDSP

2022



13th IEEE/ET International Symposium on COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING (CSNDSP)

20-22 July 2022, Porto, Portugal

Organized by: Instituto de Telecomunicações

<https://csndsp2022.av.it.pt/>



Portugal
Chapter



Venue: Dr. António Cupertino de
Miranda Centro de Congressos

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Prof I Frigyes (BME, Hungary)

CSNDSP2022 General Information

Contact: Dr Luis Nero Alves - Local Organising Committee Chair: Instituto de Telecomunicações, Aveiro, Portugal,

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3rd Call for Papers



Since 1998 CSNDSP has been recognised as an international forum to present and exchange research findings and discuss future research topics in the fields of communication systems, communications networks, digital signal processing and other related areas. CSNDSP offers the opportunities for researchers to participate in organising workshops, tutorials, and open discussions in upcoming research topics. CSNDSP 2022 is organized by Instituto de Telecomunicações a research institute in Portugal. The Local Organising Committee invites you to submit original high-quality papers for presentation at CSNDSP 2022, which will be held at the beautiful and old city of Porto in Portugal. As in previous events CSNDSP 2022 will also be hosting dedicated colloquiums and several special sessions on selected topics that you may wish to submit papers.

Colloquiums

- 8th Biennial Colloquium on Optical Wireless Communications
- 7th Colloquium on Satellite and Space Communications
- 2nd Colloquium on FRONT-EDGE-Future Optical Networking
- 1st Colloquium on Optical Fiber Devices and Sensing Applications
- 1st Workshop on Communications Technologies and Systems for Automotive and Rail

Special Sessions

- Joint RADAR & Communications for 6G Networks
- Advancements & Emerging Trends in Cyber Security
- Emerging Topics in 6G Communications
- Machine Learning for Biomedical Applications
- Teletraffic Models, Traffic Engineering & Network Optimization
- Towards ML-based efficient & secured 6G Networks
- Massive MIMO & Millimetre Wave Communications
- Signal Processing, Sensing & Communication for Connected & Automated Vehicles
- UAV Communications: Energy Efficiency, Resource Management & Security

Papers are solicited from, but not limited to the following topics:

Communications Systems & Theory

Adaptive modelling
Antennae
Chip design for communications
Coding theory & techniques
Communications for disaster management
Modulation/Demodulation
Fading channels
Filtering techniques
Radio/microwave/millimetre wave comms.
Noise reduction
Synchronization
Transmission diversity
Satellite & space communications

Communications Protocols

Communication standards
Internet communications
Internet protocols
IP over ATM

Photonics

Free space optics
Optical wireless communications
High-speed devices for photonics
Optical buffering
Optical fibre communications
Optical MEMS for lightwave networks
Optical routing/Photonic networks
Optical signal processing
Optical switching
Radio over fibre & FSO

DSP

Adaptive signal processing
Digital & multirate signal processing
DSP algorithms & applications
DSP implementation
Multidimensional signal processing
Optical signal processing
Signal processing for storage

Prof S Gao (Univ. of Kent, UK)
 Dr W Gappmair (Graz Univ. of Technology, Austria)
 Dr M Gebhart (NXP, Gratkorn, Austria)
 Dr Danielle George (Univ. of Manchester, UK)
 Dr E Gaikoumidis (Aston Univ., UK)
 Prof M Ghavami (London South Bank Univ., UK)
 Dr M Głabowski (Poznan Univ. of Tech., Poland)
 Prof R J Green (Univ. of Warwick, UK)
 Dr S Harmer (MMU, UK)
 Dr J Haase (Vienna Univ. of Technology, Austria)
 Dr J Hrad (Czech Technical Univ. in Prague)
 Prof A Inoue (Chiba Institut. Of Tech., Japan)
 Dr M Jubran, Birzeit University, Palestine.
 Dr D Ka Chun So (Univ. of Manchester, UK)
 Dr A Kaloxylas (Univ. Of Peloponnese, Greece)
 Dr T Kamalakis (Univ. of Athens, Greece)
 Prof G Kandus (IJS Ljubljana, Slovenia)
 Dr C G Lee (Chosun Univ., China)
 Prof Mark Leeson (Univ of Warwick, UK)
 Prof S K Liaw (Nat. Taiwan Univ. of Sc. and Tech., Taiwan)
 Dr W-K Ling (Guangdong Univ. of Technology, China)
 Dr F Liu (Univ. Twent, The Netherlands)
 Prof Simon Maskel, Univ of Liverpool, UK
 Prof M Matijasevic (FER Zagreb, Croatia)
 Prof M Matsumoto (Waseda Univ., Japan)
 Prof F S Marzano (Univ. of L'Aquila, Italy)
 Prof A Mohammad (Blekinge Inst. of Tech., Sweden)
 Dr I Moscholios (Univ. of Peloponnese, Greece)
 Dr R Ngah (Tech. Univ. of Malaysia, Malaysia)
 Dr Saeed Olyaei (Rajaei TT University Univ., Iran)
 Prof. Faruk Ozek (Ankara Univ., Turkey)
 Prof. R Qahwaji (Bradford University, UK)
 Dr P Pacyna (Univ. of Science and Tech., Poland)
 Dr S Papaharalabos (Natio. Observatory of Athens, Greece)
 Prof R Pentty (Cambridge Univ., UK)
 Dr W O Popoola (Glasgow Caledonian Univ., UK)
 Dr W Pribyl (TU Graz, Austria)
 Dr S Rajbhandari (Bangor University, UK)
 Dr F Ramos (UP Valencia, Spain)
 Dr P Remlein (Poznan Univ. of Technology, Poland)
 Dr J Rodrigues (Agnel Technical Education Complex, India)
 Dr R Saatchi (Sheffield Hallam Univ., UK)
 Dr P Saengudomlert (Bangkok Univ. Thailand)
 Dr S M Sajid (Univ. of Eng.&Tech., Lahore, Pakistan)
 Dr Alex Shenfield (Manchester Met. Univ., UK)
 Prof S Shioda (Chiba Univ., Japan)
 Dr I Soto (Santiago Univ., Chile)
 Dr Mathew Southgate (MMU, UK)
 Dr U Speidel (Univ. of Auckland, New Zealand)
 Dr R Stewart (AIT, Ireland)
 Dr L Stergioulas (Brunel Uni., UK)
 Dr S Sygletos (Univ. of Karlsruhe, Germany)
 Dr A A Tahat (Princess Sumaya Univ. for Tech., Jordan)
 Prof H Takruri (Univ. of Salford, UK)
 Prof I Tomkos (AIT, Greece)
 R G Tosibeleffi (Ministero Sviluppo Economico, Italy)
 Dr X Tang - Tsinghua University, Beijing, China
 Dr P Truchly (Slovak Univ. of Tech., Slovakia)
 Dr A Vinel (Russian Academy of Sciences, Russia)
 Prof Y Viniotis (Univ. Raleigh, USA)
 Prof. V Vitsas (International Hellenic University, Greece)
 Dr Andrew Weightman, Univ. of Manchester, UK
 Dr P Xiao (Queen's Univ., Belfast, UK)
 Dr L Yi (Shanghai Jiao Tong University, China)
 Dr K Yousef (Chamran Univ. Iran)
 Prof M N Zervas (Southampton Univ., UK)
 Dr J Zhao (Tyndall National Institute, Ireland)
 Dr Z Zhu (University of Science and Technology, China)
 Dr P Zwierzykowski (Poznan Univ. of Tech., Poland)

Routing protocols
Transport control protocols

Networks & Network Management

Bandwidth management and Buffering
Channel allocation
Congestion & admission controls
Digital integrated services
Intelligent networks
Modelling and simulation techniques
Network management
QoS, reliability & performance modelling
Queueing theory
Regulatory issues
Routing issues & multicasting
Security & privacy
Signalling, traffic control, etc.
Communications for sustainability and green energy.
Smartphones/Home networks/Residential Gateways
Internet of things for smart living and e-health
Middleware support for smart home and health telematics services

- Papers may be presented in the form of **Oral presentation and/or Poster**
- Contributions by **MPhil/PhD research students** are particularly encouraged

Extended Submission Dates

- **Full paper: 2 March 2022**
- **Notification of acceptance: 14 April 2022**
- **Camera-ready: 31 May 2022**
- **Registration & payment: until 31 May 2022**

Submission & Publication Details

- Electronic submission ONLY, through: <http://edas.info>
- All papers will be reviewed by at least three referees
- The manuscripts must fit IEEE conference template for publishing at IEEE-Xplore
- All papers will be published in the conference proceedings
- Selected papers will be published in special issues of journals (**to be announced**)

Registration Details

- Full registration
 - IEEE/IET/BCS Member – 450€
 - Non-IEEE/IET/BCS Member – 550€
- Student registration
 - IEEE/IET/BCS Member – 350€
 - Non-IEEE/IET/BCS Member – 450€
- Registration covers social events, lunches, coffee breaks, and paper processing charges
- Early bird registration from 31st of March to 31st of May
- Late registration after 31st of May will incur in a penalty of 100€.

The City of Porto

Voted the *European Best Destination* in 2017, **Porto**, is the second-largest city in Portugal, after the capital, Lisbon. Located in the north of the country by the outlet of the Douro River, it has a unique atmosphere of elegant neighbourhoods and large villas sitting on narrow cobbled streets. One of the older cities in Europe (dating back to 300 BC), this soulful city was classified as a World Heritage Site by UNESCO in 1996. You will have the opportunity to explore Porto – its alleyways, full of history and nostalgia, or an evening walk along the Douro River, visiting the vibrant *Mercado do Bolhão* or sampling its renowned Port wine. In terms of a culinary experience, one is often spoilt for choice in Porto, with some of this region's specialties being the codfish, *tripas à moda do Porto*, *francesinha*, and the famous Portuguese sweet treat- *pastel do nata*. The venue for CSNDSP 2022 is the Dr. *António Cupertino de Miranda Centro de Congressos*, which offers easy public transport access to the downtown.

For further information visit: <https://csndsp2022.av.it.pt/>

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