

Informatics Europe

The European Voice of Informatics Research and Education

Members Special Session – October 23, 2023

Prof. Dr. Enrico Nardelli – IE President Nuria Anguera – IE Executive Director



Intro round



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Members Introductions

In < 1 minute...

- 1. Who are you
- 2. Questions to be answered during this session







Mission & Structure



Started in 2005 as a Dept. Heads & Deans gathering, to advance quality teaching and research in Europe

"The departments of computer science at <u>EPF Lausanne</u> and <u>ETH</u>

<u>Zurich</u> are taking the initiative of a first meeting of heads of departments in Europe.

Until now there hadn't been any effort, comparable to the <u>Computing Research Association</u> in the US with its annual "<u>Snowbird</u>" conference, to provide a forum where they could discuss strategic and managerial matters of the discipline and coordinate their efforts. We feel it's time to start."

1st ECSS (European CS Summit) call, 2005



IE today is a <u>community of European leaders</u> in Informatics R&E

- We are a non-profit membership association.
- We represent the public and private research community on informatics* in Europe and neighbouring countries.
- We focus on top-level international dialogues on strategic,
 managerial and policy issues related with Education, Research,
 and the Social Impact of informatics.
- Our members are institutions (departments, institutes, faculties, research labs and companies). Membership extends to all faculty of member institutions and researchers of their labs.
- We exist because some achievements are only possible when acting as a community.

INFORM, EUROPE

IE represents ~ 50K researchers across Europe

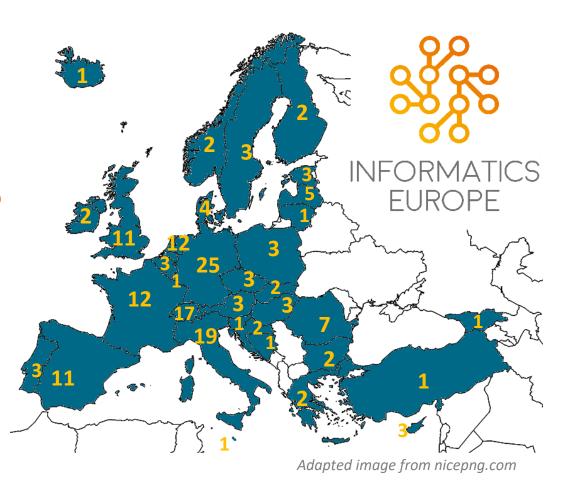
Over 170 Institutions from > 30 Countries

Avg. growth rate of 14%



The more we are the louder our voice is!

<u>Full member's list</u> and statistics on our website



^{*}Assuming an average of 7 pp/research group and 10, 20 resp. 50 research groups per small, medium resp. large institution.



Our Strength: leverage variety to shape a concerted European Informatics future



Mission

Find concerted positions and **act on shared priorities** in Education, Research, and the Social
Impact of informatics, by **fostering unity** in the
variety of its member institutions
and **promoting** pan-European **collaboration**.

In particular, we aim to **empower our members** to:

- Create opportunities for joint initiatives and knowledge exchange
- Advocate for Informatics in European policy discussions.
- Promote quality standards and best practices
- Foster ethical and responsible Informatics teaching and research.
- Nurture talent, assuring a pipeline of diverse leaders with broad understanding of the discipline.



Steered by Scientists at the service of the Informatics community - Our Board



Enrico Nardelli Università di Roma 'Tor Vergata' **IE President** Education



Jean-Marc Jézéquel IRISA/University of Rennes **IE Vice President Policy** recommendations



Elisabetta Di **Nitto** Politecnico di Milano **IE Vice President Diversity**



Gregor Engels Paderborn University





Marco Aiello University of Stuttgart

Green ICT



Lenuta Alboaie Alexandru Ioan **Cuza University** of lasi **Industry**

Engagement



Přemek Brada University of West Bohemia

Data Analysis & Reporting



Dick Bulterman CWI/VU Amsterdam

Webinars



Manuel Carro Technical University of Madrid / IMDEA **Open Science**



Gordana Dodig-Crnkovic **Chalmers University** of Technology **Ethics**



Harald Gall University of Zurich **Department Evaluations**



Dimka Karastovanova Kim Mens University of Groningen **Early Career** Researchers



Université catholique de Louvain **Membership**



Viorel Negru West University of Timisoara **Membership**



Pekka Orponen Aalto University **NIA** relations



IE Executive

Director

Nuria Anguera





Administrated by 2.7 FTE: IE Office



Nuria ANGUERA
Executive Director



Karin TRIVIERE
Admin. & Accounting



Kit Wan CHUI
Communication



TIKHONENKO
Web, Data & Analysis

Responsibilities:

- Overall strategy, operations, projects and activities
- Relations with Industry
- Membership Committee

Responsibilities:

- Membership Management
- Accounting
- ECSS Organization
- Office General Administration

Responsibilities:

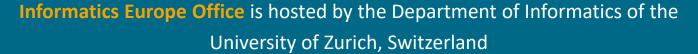
- Communications
- Relations with National Informatics Associations
- Academic Empowerment (courses, Webinars, etc.)

Responsibilities:

- Analytics & Data Portal
- CV repository
- EUGAIN GHM
- Webpage management

Webpage link









Activities in a nutshell



Working Groups channel community contribution Currently 7 active ones

- Education Research (39 people, from 29 institutions)
- Ethics (19 people, from 12 institutions)
- WIRE ⇒ Diversity & Inclusion (16 people, from 13 institutions)
- Data Analysis & reporting (12 people, from 10 institutions)
- Policy Recommendations (6 people, incl. repr. of 5 NIAs)
- Green ICT (13 people, from 11 institutions)
- Open Science (19 people, from 17 institutions)



Leading to joint pan-European activities... Including EU funded projects & partnerships











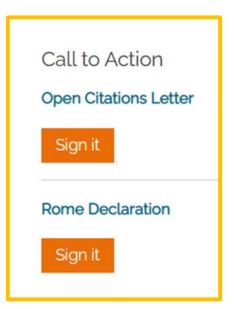




... Policy Recommendations ...

At European, national and institutional level

- With the collaboration of our member National
 Informatics Associations
- On issues that relate to any of the goals of the organisation, at the European level
- Aiming at empowering
 - IE member institutions
 - National policies
 - <u>European Commission</u> decisions
- Outcomes: statements, positions, reports, ...
 but also open calls to action





... and Community empowerment through IE Services & WGs' Outcomes

Knowledge Exchange







ECSS 2023
INFORMATICS:
SHAPING THE FUTURE

European Visibility



Development Opportunities (for Departments and Individuals)



















Call to Action - Community engagement



IE membership brings tangible benefits to you and your organization

Access to Resources & Insights



- International Recognition and Visibility
- Bring forward your institution's interest in top-level international dialogues on strategic management and policy issues.
- Expanded talent pool
- Special fees on services, for all faculty members
- Networking and collaboration



You & your organization are key for IE IE will get as far as we collectively want to take it





Be IE ambassador in your institution and networks!

- → Lead and participate in IE activities
 Working Groups, Board of directors, Webinar, Surveys, joining/hosting ECSS
- → Use and promote IE services
- Follow and share us (<u>LinkedIn</u> / <u>twitter</u>/ <u>IE bulletin</u>)

Active Participation

- 1. How do you see your participation / our collaboration going forward?
- 2. Any other ideas?
- 3. Questions?

if you want to go fast, go alone;if you want to go far, go together.







Let's enjoy ECSS!

Annex: Further exploring some IE activities and services



IE publications: policy recommendations, reports, best practice booklets, articles

Public Consultation on European Digital Principles



Feedback provided by Informatics Europe to the European Commission for public consultation on the formulation of a set of principles to promote and uphold EU values in the digital space.

Submitted to the European Commission on 2 Sep 2021.

IE-Feedback-EC-European Digital Principles.pdf

117.49 kB Date: oz September 2021

Bridging the Digital Talent Gap: Towards Successful Industry-University Partnerships



This report presents the results of the discussions held during the workshop Bridging the Digital Talent Gap: Towards Successful Industry-University Partnerships organized by Informatics Europe and the European Commission's Directorate-General for Communications Networks, Content and Technology (DG CONNECT) in Rome on October 2019.

✓ bridging-digital-talent-gap-report.pdf Details

Date: oz April 2020

Feedback on the Draft Report "Computing Curricula 2020"



Feedback provided by Informatics Europe on the Draft Report of the Computing Curricula 2020 (CC2020) task force. CC2020 is a joint project launched by professional computing societies to examine the current curricular guidelines for academic degree programs in Computing and provide a vision for the future of Computing.

Submitted to the CC2020 Steering Committee on 15 June 2020.

IE-comments-CC-2020.pdf Details

File Size: 134.96 kB

Date 18 June 2020

Informatics as a Fundamental Discipline for the 21st Century



The article published in the "Communication of the ACM" journal describes the current state of the Informatics education at the European scene, outlines main statements, actions and outcomes of the Informatics for All Initiative and explains main challenges related to the realization of the Informatics for All Strategy across Europe.

CACM_Informatics_All.pdf Details

File Size: 622 MB 04 April 2019

European Values for Ethics in Digital Technology



The research report on European Values for Ethics in Technology is the first Intellectual Output of the Ethics4EU project. Digital Ethics deals with the impact of digital Information and Communication Technologies (ICT) on our societies and the environment at large. It covers a wide spectrum of societal impacts including issues such as data governance, privacy and personal data, Artificial Intelligence (AI), algorithmic decision-making and pervasive technologies.

<u>■ European-Values-for-Ethics-in-Digital-Technology.pdf</u>

08 April 2021

Informatics Research Evaluation



Report on Informatics Research Evaluation prepared by the Informatics Europe Research Evaluation Working Group. The report focuses mainly on the main principles and criteria that should be followed when individual researchers are evaluated for their research activity in the field of Informatics, addressing the specificities of this area. It confirms the findings of the 2008 report on Research Evaluation for Computer Science, while incorporating recent developments concerning the growing emphasis on collaborative, transparent, reproducible and accessible research.

A summary is openly accessible by following this link. Logged in IE members can download the full report using the link below.

Informatics-Research-Evaluation-2018.pdf Details

File Size: 1.03 MB 22 March 2018





Informatics in Schools activities

Fostering high-quality education in Informatics is one of the pillars of Informatics Europe. We are committed to promoting informatics education as one of the fundamentals in modern education across Europe. Here are some of our activity and achievement highlights:

CECE's Map of Informatics in European Schools, in partnership with ACM Europe >

Establishment of Informatics for All initiative, workshops & position paper >

Informatics Reference Framework for School >

IE at EU Commission Expert Group on Al and Data in Education and Training >

We also run **petitions to advocate informatics for all at the European level,** and support national associations in doing the same at their local level. Take action and sign them!

- Rome Declaration: join us to make Informatics accessible to all, throughout Europe.
- <u>Joint manifesto</u> "Por la Informática en España", supporting our member institutions <u>SCIE</u>, and <u>CODDII</u> to promote the extension of informatics education at all levels of the educational system in Spain.

Webpage link



Recent outcomes of the I4All coalition

Designing and Implementing a Concrete Informatics Curriculum for School



This document focuses on pedagogical issues and related concerns that should be considered when using the Informatics Reference Framework for School for the development of concrete curricula.

It is, in fact, of utmost importance to have have concrete curricula designed to take into account particular situations and needs in each country, as well as accommodating age and appropriate stages of development of pupils. An informatics curriculum should be designed for all pupils; equality, diversity and inclusion issues are crucial, including the important issue of gender balance.



Download

<u>M Designing-and-Implementing-a-Concrete-Informatics-Curriculum-for-School.pdf</u>

File Size: 888.99 kB

Date: 16 December 2022

Informatics Reference Framework for School



The Reference Framework was published in February 2022 as a report to support the advancement of informatics as a fundamental discipline for the 21st century. It is a publication of the Informatics for All coalition, of which Informatics Europe is one of the founding members since 2018.

This Reference Framework has been presented to European Commission and further discussed at a stakeholder consultation meeting, on 6th April in Brussels, in preparation for a Council Recommendation on improving the provision of digital skills in education and training,

Details

Download





IE Higher Education Data Portal and Data Analysis & Reporting WG



Higher Education Data Portal



The Informatics Higher Education Data Portal is a project of Informatics Europe created with the goal of providing our members, the Informatics academic community, policymakers, industry and other stakeholders a complete and reliable picture of the state of Informatics (Computer Science, Computing, IT, ICT) higher education in Europe. Informatics Europe empowers our community by providing the precise and objective information that is indispensable for understanding the field and making informed, effective policy decisions in Europe.

What is Available?

This portal presents a wealth of fundamental data including:

- Statistics of students enrolled and degrees awarded at Bachelor's, Master's and PhD level, including gender distribution in absolute numbers and percentages, both at Research Universities and Universities of Applied Sciences.
- Academic salaries reported at the level of PhD Candidate, Postdoctoral Researcher and several Professor ranks in selected countries (available only to Informatics Europe members).

Beyond the statistics, a range of qualitative data that supplements and complements the statistics is presented, including:

- · Subjects (Study Programmes): list of terms identifying Informatics study programmes in each country.
- Institutions: list of universities and academic units offering Informatics higher education in each country, including University names, Department/Faculty/School/Institute names and direct hyperlinks to their websites.
- Higher Education Systems: description of the higher education system in each country.
- Academic Positions & Titles: comparative analysis of some key academic positions PhD Candidate, Postdoctoral Researcher and Professor and corresponding employment details in selected countries.

Statistics	Subjects	Institutions & Academic Units	Higher Education Systems
Academic Positions & Titles	Academic Salaries	Download Data (Only For Members)	





Ethics Activities

Take the Ethics Survey



The Project

The Ethics4EU Project is an Erasmus+ international project that explores issues around teaching ethics in Computer Science. Ethics4EU has developed new curricula, best practices and learning resources for Digital Ethics for Computer Science lecturers. It follows a "train the trainer" model for up-skilling Computer Science lecturers across Europe.



DIGHUM

Inclusion4EU

Ethics Working Group

Long-term Goals

- Create a sustainable European Community of Practice in Informatics ethics
- · Ensure that the importance of teaching ethics in Informatics degree courses is recognized
- Increase literacy on ethics among Informatics lecturers
- · Increase literacy on ethics among decision-makers (CEOs, policymakers political organizations)

WG Operation

- Chair: Dympna O'Sullivan, TU Dublin, Ireland
- Secretary: Gordana Dodig-Crnkovic, Chalmers University of Technology, Sweden
- Next meetings: TBA

2022 - 2023 Objectives and Related Activities

- · Identify gaps in Informatics lecturers' knowledge of ethics
- Better understand the European landscape in relation to teaching practices for Ethics in Informatics and related disciplines
- · Raise awareness about the importance of teaching Ethics to students in Informatics and related disciplines
- · Disseminate best practices in teaching Ethics to Informatics students

Activity 1: Survey - Teaching Practices for Ethics in Informatics >

Activity 2: Community of Practice - Instruction of Ethics >

Activity 3: Best Practice Repository (April 2023 – September 2023) >





Diversity & Inclusion Activities



2023 Minerva Informatics Equality Award Supporting female careers in informatics research and education With Europe School Coogle EUR 5,000 Prize



Diversity and Inclusion Working Group

Long-term Goals

- Contribute to designing software systems that behave respecting diversity.
- Ensure the diversity dimension is considered in the education process of Informatics Europe members.
- Defining best practices to cope with diversity through inclusion in Informatics.

WG Operation

- Chair: Simona Motogna, Babeş-Bolyai University, Romania.
- Secretary: Claire Matti, Haute école pédagogique du canton de Vaud, Switzerland.
- · Next meeting: May 2nd

2022 - 2023 Objectives and Activities

- Creating awareness about the problems, challenges, and values of diversity;
- Acting as a collector of European initiatives on diversity and inclusion in Informatics Research and Education.
- · Start a network of interested parties.

Activity 1: Mapping of current initiatives - November 2022 - April 2023 >

Activity 2: Best Practices booklet - April 2023 - July 2023 >

Activity 3: Repository creation - December 2022 - July 2023 >

Webpage link





Open Science Activities

IE Open Science Working Group

As part of its mission to give unbiased information and to agglutinate and balance diverse opinions, Informatics Europe formed in 2021 an Open Science Working Group, in an attempt to clarify the main actors and trends behind Open Science. This Working Group inherits ideas and aims from the <u>Leaders Workshop</u> session that took place during <u>ECSS 2021</u> in Madrid, and where some very interesting opinions were presented. It currently consists of the following Task Forces:

- Open Science and Data Research Management
- Open Access
- Conference Maturity Model
- · Open Code Repositories
- · Open Citations Initiative

Outcome

Open Access: Status and Recommendations







Department Evaluation Service

Charting a Sustainable Success Path for Your Department

- Expert-Led Assessment
- Peer-Review Excellence
- Transparency and Neutrality
- IE quality guarantee
- Comprehensive Insights
- Beyond Research Results







Academic Leadership Courses

For, with, by Computer Scientists



Evidence-based leadership practices to **create positive academic cultures**



In which people can thrive together and do great work in research, education & impact on society



"[The course] really changed the way I think about my work. It cannot be said enough: this course was the best course I have ever taken."

[Online course participant]



Webpage link