

## **Informatics Europe**

# The European Voice of Informatics Research and Education

25 October 2022

### Agenda

**Informatics Europe** 

### **1.Who we are**

2. What we do





is

YOU





# The European voice of the R&E Informatics community



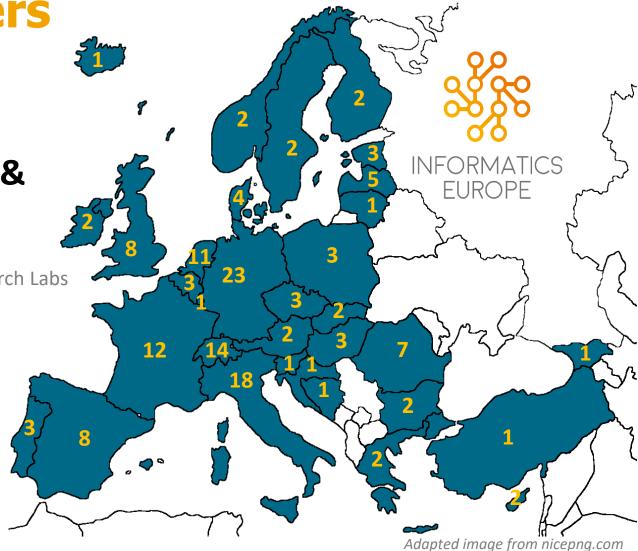
## **Our Members**

## Over 30 Countries &

### **160 Institutions**

Departments, Faculties, Schools, Institutes, Private & Public Research Labs

Over 15,000 researchers\*



\*Assuming a conservative average of 10 research groups per institution, with 10 researchers each

### Full member's list on our website



## **Our Board**

### Scientists at the service of the Informatics community



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



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



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

Inclusion

Louvain



**Gregor Engels** Paderborn University

**IE Treasurer** 



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 **Societal Impact** 



**Harald Gall** University of Zurich Leaders **Workshop** 



**Kim Mens Viorel Negru** Université West University of catholique de Timisoara **Membership Membership** 



Pekka Orponen Aalto University National Inform. Associations relations



Norbert Ritter University of Hamburg **ECSS 2022** 



Standa Živný

University of

Michael E.

Caspersen

IT-vest

Education

Research



**Nuria Anguera** 

Oxford **Early Career Researchers** 

**IE Executive** Director



### **Our Office** General administration and coordination



Nuria ANGUERA Executive Director



Karin TRIVIERE Executive Assistant

#### **Responsibilities:**

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

#### **Responsibilities:**

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



**Kit Wan CHUI** Communication and Administration

#### **Responsibilities:**

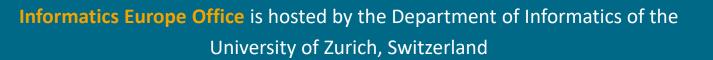
- Communications
- Relations with National Informatics Associations
- Academic Empowerment (Courses, Webinars, etc.)



**Svetlana TIKHONENKO** Web, Data & Analysis

#### **Responsibilities:**

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





# **Our Working Groups**

- Research in Education (39 people, from 29 institutions)
- Ethics (19 people, from 12 institutions)
- Diversity & Inclusion (16 people, from 13 institutions)
- Data Analysis & Reporting (12 people, from 10 institutions)
- Policy Recommendations (5 people, from 5 NIAs)
- Sustainability (13 people, from 11 institutions)
- Open Science (19 people, from 17 institutions)



### Agenda

**Informatics Europe** 

1. Who we are

### 2.What we do – General Goals



## What we do

- We represent the public and private research community of informatics in Europe and neighbouring countries.
- We create a strong common voice to safeguard and shape quality research and education in informatics in Europe.
- We promote concerted positions and act on shared priorities in the areas of Education, Research, Knowledge Transfer and Social Impact of informatics.



# **Our goals**

- Foster quality of research and education in Informatics.
- Promote pan-European knowledge transfer & collaboration between academia and industry and society, including government and public institutions.
- **Engage with society** on the nature and impact of Informatics.
- Promote quality standards and best practices in research, education, and knowledge transfer.



### Agenda

**Informatics Europe** 

1. Who we are

### 2.What we do – Working Group Activities



## **Education Research WG**

### **Composition and Goals**

- Chair: Michael E. Caspersen and Enrico Nardelli, IE Board
  Secretary: Keith Quille, TU Dublin
- Composition: Individual voluntary sign-up

#### • WG Goals:

Informatics for All goals as a starting point



- Establish informatics as a fundamental discipline to be taken by all students in school.
- It should be recognized by all as a truly **foundational discipline** that plays a significant role in education for the 21st century.
- Promote the Informatics Reference Framework for School
- Initiate European Informatics Education research network activities
- ... (more may be decided at the next WG meeting in November)



## **Education Research WG**

### Members (currently 39 from 13 countries)

Michael E. Caspersen, It-vest - networking universities (Chair) Enrico Nardelli, University of Rome "Tor Vergata", Italy (Chair) Thomas Alessandro Ciarfuglia, Sapienza University of Rome, Italy Marco Antoniotti, University of Milano-Bicocca, Italy Maia Archuadze, Iv. Javakhishvili Tbilisi State University, Georgia Erik Barendsen, Radboud University, the Netherlands Morgane Chevalier, Haute école pédagogique (HEP) du canton de Vaud, Switzerland Claire Conneely, Google Fabrizio d'Amore, Sapienza University of Rome, Italy James Doddy, TU Dublin, Ireland Dilek Dustegor, University of Groningen, the Netherlands Luca Forlizzi, University of L'Aquila, Italy Matthias Hauswirth, Università della Svizzera italiana, Switzerland Juraj Hromkovic, ETH Zurich, Switzerland Johan Jeuring, Utrecht University, the Netherlands Manana Khachidze, Iv. Javakhishvili Tbilisi State University, Georgia Michael Kölling, King's College London, UK Janika Leoste, Tallinn University, Estonia Gabriele Lenzini, University of Luxembourg, Luxembourg Violetta Lonati, University of Milan, Italy

David López, Universitat Politècnica de Catalunya, Spain Ugo Lopez, Università degli studi di Bari Aldo Moro, Italy Carlos Matos, Royal Holloway University of London, UK Christian Napoli, Sapienza University of Rome, Italy Keith Nolan, TU Dublin, Ireland Ciaran O'Leary, TU Dublin, Ireland Gabriel Parriaux, Haute école pédagogique (HEP) du canton de Vaud, Switzerland Stefan Pasterk, Alpen-Adria-Universität Klagenfurt, Austria Dana Petcu, West University of Timisoara, Romania Keith Quille, TU Dublin, Ireland Mariana Rocha, TU Dublin, Ireland Adrian Sterca, Babes-Bolyai University, Romania Marco Temperini, Sapienza University of Rome, Italy Ernest Teniente, Sociedad Científica Informática de España (SCIE), Universitat Politècnica de Catalunya (UPC), Spain Magda Tsintsadze, Iv. Javakhishvili Tbilisi State University, Georgia Matias Valdenegro-Toro, University of Groningen, the Netherlands Ángel Velázguez, Universidad Rey Juan Carlos, Sociedad Científica Informática de España (SCIE), Spain Tatjana Welzer, University of Maribor, Slovenia.



# **Education Research WG**

#### Outcomes

### **2022 Achievements:**

- Formal launch of the WG in late April with 38 participants.
- informatics for all g

goals as a starting

- Education workshop @ ECSS 2022 (earlier today)
- First proper meeting in the WG (November 2022)

### In the pipeline, if enough

#### interest to work on these

- Make the IRF4S known in our countries
- Collect feedback from users (teachers and (other) curriculum designers)
- Map national curricula wrt IRF4S
- Initiate European IEd research network activities, e.g., workshop
   @ ITiCSE
- International summer school (associated with ITiCSE)



## **Ethics WS**

#### **Current members**

Dympna O'Sullivan, TU Dublin, Ireland (Chair) Thomas Alessandro Ciarfuglia, Sapienza University of Rome, Italy Suzana Alpsancar, University of Paderborn, Germany Tiziana Catarci, Sapienza Università di Roma, Italy Andrea F. Curley, TU Dublin, Ireland Radu Dobrin, Mälardalen University, Sweden Gordana Dodig-Crnkovic, Chalmers University of Technology, Sweden Damian Gordon, TU Dublin, Ireland Manana Khachidze, Iv. Javakhishvili Tbilisi State University, Georgia Monica Landoni, Universita della Svizzera Italiana, Switzerland Gabriele Lenzini, University of Luxembourg, Luxembourg Ugo Lopez, Università degli studi di Bari Aldo Moro, Italy Emma Murphy, TU Dublin, Ireland Alexander Pretschner, TU München, Germany Ayushi Rastogi, University of Groningen, the Netherlands Yannis Stavrakakis, TU Dublin, Ireland Brendan Tierney, TU Dublin, Ireland Tatjana Welzer Družovec, University of Maribor, Slovenia Ernst Wit, Universita della Svizzera Italiana, Switzerland



## **Ethics WG**

### Long-term Goals and expected outcomes

- Ensure that the importance of teaching social impact and ethics issues in Informatics in degree courses is recognized
  - Accreditations (e.g. BCS)
  - Guidelines for what content is important for accreditation and how to include it in curricula
- Increase literacy and awareness about ethical issues in the general population of Europe
  - Citizen science dissemination
- Increase literacy on ethics among decision makers (CEOs, policymakers political organizations)
  - White papers



## **Ethics WG**

### Towards the LT Goals: 2023 objectives

- Better understand the European landscape with relation to teaching practices for Ethics in CS, Informatics and related disciplines
  - Follow-up survey to the 2019 one
- Raise awareness about the importance of teaching Ethics to students in CS, Informatics and related disciplines
  - > Webinars, publications, engagement with special interest groups (incl. industry)
- Disseminate best practice in the of teaching Ethics to students in CS, Informatics and related disciplines
  - Curricula with Ethics content
  - Case studies (e.g. as produced by the Ethics4EU project)
  - > Methodologies to facilitate critical thinking and debate



# **Diversity & Inclusion WG**

Composition and goals

- Current chair: Elisabetta Di Nitto, IE Board
- **Composition:** Individual voluntary sign-up
- WG Goals:
  - Creating awareness about the problems, challenges, and values of diversity;
  - Acting as a collector of European initiatives on diversity and inclusion;
  - > Defining best practices to cope with diversity through inclusion;
  - Create a network of interested parties.



# **Diversity and Inclusion WG**

### **Current members**

<u>Cinzia Cappiello</u>, Politecnico di Milano, Italy Thaleia Dimitra Doudali, IMDEA Software Institute, Spain Antinisca Di Marco, University of L'Aquila, Italy Elisabetta Di Nitto, Politecnico di Milano, Italy Svetlana Hensman, TU Dublin, Ireland Beate List, Google Cristina Manresa, Universitat de les Illes Balears/Sociedad Científica Informática de España, Spain Davide Martinenghi, Politecnico di Milano, Italy Maristella Matera, Politecnico di Milano, Italy Claire Matti, Haute école pédagogique du canton de Vaud, Switzerland Lili Nemec Zlatolas, University of Maribor, Slovenia Ayushi Rastogi, University of Groningen, Netherlands Peter Sestoft, IT University of Copenhagen, Denmark Anna Szlávi, NTNU, Norway Ayumi Takemoto, University of Latvia, Latvia Claudio Zandron, Università di Milano-Bicocca, Italy



# **Diversity and Inclusion WG**

### Outcomes

#### 2022 Summary

- Formal launch of the WG in April
- Goals, interests
- Survey to collect contributions about diversity and inclusion is under development and will be launched soon
- A github website to collect links to concrete contributions is under preparation

#### **Planned**, depending on capacity

- Develop a booklet to create awareness about the problems of diversity
- Develop a booklet including best practices and indicators concerning diversity of inclusion



## **Data Analysis and Reporting WG** Composition and Goals

- Informatics Europe Data Portal, one of our best assets
- Chair: Přemek Brada, member of IE Board of Directors
- **Composition:** Individual voluntary sign-up

### WG Goals:

- Ensure IE has high quality, reliable data sets at a pan-European level.
- Provide meaningful statistics and analytic outputs (1-2 reports each year envisaged)



## **Data Analysis and Reporting WS** Current members

**Přemek Brada**, University of West Bohemia, Czech Republic (Chair) Maia Archuadze, Iv. Javakhishvili Tbilisi State University, Georgia Ismael García-Varea, Universidad de Castilla-La Mancha, Spain James Doddy, TU Dublin, Ireland Manana Khachidze, Iv. Javakhishvili Tbilisi State University, Georgia Markus Lange-Hegermann, Technische Hochschule Ostwestfalen-Lippe, Germany Ernestina Menasalvas, Universidad Politecnica de Madrid, Spain Christian Napoli, Sapienza University of Rome, Italy Axel Ngonga, Paderborn University, Germany Damian Tamburri, Politecnico di Milano, Italy Brendan Tierney, TU Dublin, Ireland Svetlana Tikhonenko, Informatics Europe, Switzerland Magda Tsintsadze, Iv. Javakhishvili Tbilisi State University, Georgia



# **Data Analysis and Reporting WG**

#### Outcomes

### 2022 Summary

- Formal launch of the WG in May
- Goals, interests
- Briefing on the data portal internal workings

#### **Planned**, depending on capacity

- Analysis using current data
- Improvements (technical, methodological, geographical coverage) of the dataset

Your input welcome:





## **Policy Recommendations WG** Composition and Goals

- Chair: Jean-Marc Jézéquel, IE Board Director
- **Composition:** a representative of each national association which is currently a member of Informatics Europe

### • WG Goals:

- Shaping public policy on Informatics research and education by producing policy documents such as statements, positions, reports, recommendations or feedbacks to public consultations on issues that relate to any of the goals of the organization
- Produce at least 2-3 statements or feedback to the European Comission each year.



## **Policy Recommendations WG** Outcomes

### **2022 Achievements**

- formal launch of the WG in early March, with Spain, Germany, Italy, and France.
- Feed back provided on
  - Conflict between Europol and the European Data Protection Supervisor
  - <u>Digital education enabling</u> <u>factors for success</u>
  - Policy Recommendations supporting the uptake of AI in the Public Sector (DG CNCT and ICF)

### In the pipeline, if enough

interest to work on these

- Digital Euro
- The Digital Services Act (DSA)
- European cybersecurity certification scheme (EUCC) based on common criteria.
- GreenData4All



### Sustainability WG Composition

Christian Napoli, Sapienza University of Rome, Italy (Chair) Vasilios Andrikopoulos, University of Groningen, the Netherlands <u>Stefania Bandini</u>, University of Milano-Bicocca, Italy Antinisca Di Marco, University of L'Aquila, Italy <u>Gordana Dodig-Crnkovic</u>, Chalmers University of Technology, Sweden Andrea Emilio Rizzoli, IDSIA USI-SUPSI, Switzerland Marina Jirotka, University of Oxford, UK Brian Keegan, TU Dublin, Ireland Janika Leoste, Tallinn University, Estonia Henry Muccini, University of L'Aquila, Italy <u>Yanos Sazeides</u>, University of Cyprus, Cyprus Giovanni Stilo, University of L'Aquila, Italy Carolyn Ten Holter, University of Oxford, UK



### **Sustainability WG** WG Goals (tuning in progress...)

- Identify tools (where such tools exist) or develop them (where they do not) to help assessing the impact of our computational models and systems, as well as to assess the relevance of long-term model sustainability
- Create action plans to disseminate the culture of sustainability and to affirm the role of computer science and informatics for a more sustainable society, e.g. best practice guidelines for data-related activities or digital systems that affect human beings and society.
- Identify ways to lobby within our own organizations for sustainability concerns and the impact of digital technologies, finding ways to raise our voices and bring our concerns to the table campaign for colleges for a more sustainable society and a more central role of sustainability concerns and the role of computer science and informatics



### Sustainability WG Outcomes

#### **2022 Achivements**

- Launch of the WG and 2 meetings in 2022
- WG presented during the International Summer School Advances in Artificial Intelligence (Como, Italy, sep. 19-23 2022)

#### In progress:

- Sustainability Webinars Series
- Contribute to create an European Network on Sustainable ICT
- Identification of sustainabilityoriented conferences in ICT
- Collaboration with European conferences / summer schools, to raise awareness about IE WG / Sustainability.



## **Open Science WG**

- Started after ECSS 2022
- Four task forces

- Chair: Manuel Carro <manuel.carro@imdea.org>
- Open Data Research Management
  - Chair: Michael Goedicke <u><Michael.Goedicke@paluno.uni-due.de</u>>

#### Open Access

- Chair: Alfonso Pierantonio <a href="mailto:</a> <a href="mailto:elipso.pierantonio@univaq.it">elipso.pierantonio@univaq.it</a> </a>
- Open Code Repositories
- Conference Maturity Model
  - Chair: Carlo Ghezzi <a href="mailto:carlo.ghezzi@polimi.it"></a>



# **Open Science WG: Goals**

- Clarify Open Science for IE members
- Elicit homogenous view
- Open Data Research Management
  - Accelerate progress in CS
  - Ws. to explore outstanding questions
  - Design, deploy infrastructure

#### Open Access

- Collaborations with National societies on joint proposals
- Relationships with Plan-S, transformative agreements
- Clarify research evaluation

• Concrete advances in specific topics arising from the task forces

#### Open Code Repositories

- Infrastructures to safeguard / identify / reference software
- Evaluation of artifacts
- Links data / software

#### Conference Maturity Model

- How to determine / ensure conference quality / impact?
- What would be a sustainable future model?
- How do data & artifacts fit?



### Open Science WG Composition

Manuel Carro, UPM / IMDEA Software Institute (Working Group Chair) Étienne André, Loria/Université de Lorraine, France Marco Antoniotti, University of Milano-Bicocca, Italy Ioannis Chatzigiannakis, Sapienza University of Rome, Italy Oscar Corcho, Universidad Politécnica de Madrid, Spain Roberto Di Cosmo, Software Heritage / Inria, France Antinisca Di Marco, University of L'Aquila, Italy Carlo Ghezzi, Politecnico di Milano, Italy (Conference Maturity Model Task Force Chair) Michael Goedicke, University of Duisburg-Essen, Germany (Open Science & DRM Task Force Chair) Kaido Kikkas, Tallinn University of Technology, Estonia Ugo Lopez, Università degli studi di Bari Aldo Moro, Italy Ernestina Menasalvas, Universidad Politecnica de Madrid, Spain Rafael Penaloza Nyssen, University of Milano-Bicocca, Italy Silvio Peroni, University of Bologna, Italy Alfonso Pierantonio, Università degli Studi dell'Aguila, Italy (Open Access Task Force Chair) Horia F. Pop, Babes-Bolyai University, Romania Ernest Teniente, SCIE / Universitat Politècnica de Catalunya, Spain Antonio Vallecillo, SCIE / Universidad de Malaga, Spain Ernst Wit, Universita della Svizzera italiana, Switzerland



### Agenda

**Informatics Europe** 

1. Who we are

### 2.What we do – Services



# **General goals of IE services**

Empowerment of the Informatics community in Europe and particularly of our member institutions - by:

- Disseminating best practices
- Boosting visibility of members achievements
- Fostering networking and knowledge exchange
- Providing unique courses: taught by computer scientists, for computer scientists and with computer scientists



## **Broadly Know IE services**

#### Job platform

- Close to 800 posts since 2011 (of which 90 in 2022), mainly from Informatics Europe members

#### Webinar series

- Scientific and Early Career series in 2021/22; Gender Diversity series ongoing. Over 500 participants.
- Webinar recordings and slides available on IE website & YouTube channel

#### • ECSS

- Held without interruption since 2005
- 140 participants in 2021 (virtually and in-presence) and additional 55 participants to the WIRE-EUGAIN WS
- Willing to host / co-organize ECSS as from 2024? Contact us!



## **Academic Leadership Courses**

Facilitators: Prof. Geraldine Fitzpatrick & Prof. Austen Rainer



How do we **create positive academic cultures** to thrive together in our research, education & impact on society?



Our courses offer **evidence-based reflections and actions** toward that aim



For computer scientists, with computer scientists, by computer scientists



# **Academic Leadership Courses**

# **Changing Academic Cultures**

## Themes

- Situate your leadership
- Know yourself & others
- Lead yourself & others

## **Benefits**

- Further your development
- Peer-support community
- Share experience
- Gain practical strategies
- Access to a range of additional resources







# **Academic Leadership Courses**

# **Changing Academic Cultures**

Online (Spring 2023)

- New & emerging leaders
- 7 x 2hr sessions, fortnightly
- In-between work

## Residential

(June 2023) Vienna

- Senior / established leaders
- 4-day residential course
- Indoor / Outdoors
- Quiet / personal time
- Krainerhütte: 35 mins from airport







# **Academic Leadership Courses**

**Changing Academic Cultures** 

"[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]

"... a wonderful course we had with **so many valuable take-homes** that I'm now working to implement in my leadership practice."

[Residential course]



# **Department Evaluation**

# Supporting academic progress towards excellence

- Conducted by internationally recognised researchers in the field, with experience in evaluation;
- an exclusive, neutral, peer-review driven evaluation process based on the standards and experiences of IE;
- a multidimensional approach, includes aspects such as research management, research policy, research facilities, Ph.D.-training, and the societal relevance of research.



Faculty of Informatics of Masaryk University Evaluation Brno, Sept. 2022

• A thorough analysis of strengths, opportunities, and areas for improvement.



# **Networking partner in EU Projects**

## • EUGAIN COST ACTION

 Grant Holder Manager (ca 200KEUR/year, 130 people in the network and growing)

## Ethics4EU

 2019 – 2022 project (details provided in Societal Impact of Digital Transformation workshop)

## Inclusion4EU

- Just granted!
- Sister project of Ethics4EU, we must have done something right!

## • XYZ - That new project you are planning to submit!



# **CV repository – NEW in 2023!** for Informatics early career professionals



Education ~ Research ~ Society ~ Policy ~ Events ~ Resources ~ Join us ~ About ~

#### **CV Repository System**

Bachelor's students of the last year of study, Master's, and PhD students of all years of study, as well as graduates from Informatics Europe member institutions can submit their job profiles and upload CVs

Fill out the form remembering that fields with an asterisk are required.

#### Personal data

0%	
Full name *	Svetlana Tikhonenko
Email *	svetlana.tikhonenko@informatics-europe.org
Gender *	female ~
Date of birth *	02/01/1990
	From 01 Jan 1930 to 01 Jan 2004
Country of origin *	Belgium
Country of residence *	Switzerland
	For country not in Europe, select "other"
Full name of your thesis advisor *	Enrico Nardelli
Institutional email of	nardelli@mat.uniromaz.it
your thesis advisor *	

Latest News

#### IE Scholarship for Digital Humanism Summer School 2022

\_\_\_\_\_

#### ECSS 2022: Registration Opens Now!

#### Join ITiCSE 2022

Register Now: Online Academic Leadership Development Course (Autumn '22)

#### Call for Nominations: Be IE's Next Board Directors



Adapted image from nicepng.c

We represent over 150 university departments and research institutes in Informatics from all over Europe.

Interested in joining?

- Free service for students and recent graduates of IE member institutions
- Paying service for companies
- Tool currently under development, sponsored by **BENDING SP**
- CVs input required as from December 2022, help us disseminate!!



# Agenda

**Informatics Europe** 

- 1. Who we are
- 2. What we do
- 3. What we need



# **Your Active Participation**





# **IE is a community, it's you** your support in necessary

# Dissemination

- Follow us on LinkedIn & Twitter
- Distribute our monthly Bulletin & activities calls
- Encourage your colleagues and students to make use of IE services

# Content contribution

 Encourage matter-experts to join task-forces and/or working groups

# Strategic direction

- Share with us your interest and ideas for further initiatives







# Questions and suggestions?







### ECSS 2023

23-25 October 2023 (Mon-Wed)

Edinburgh, Scotland

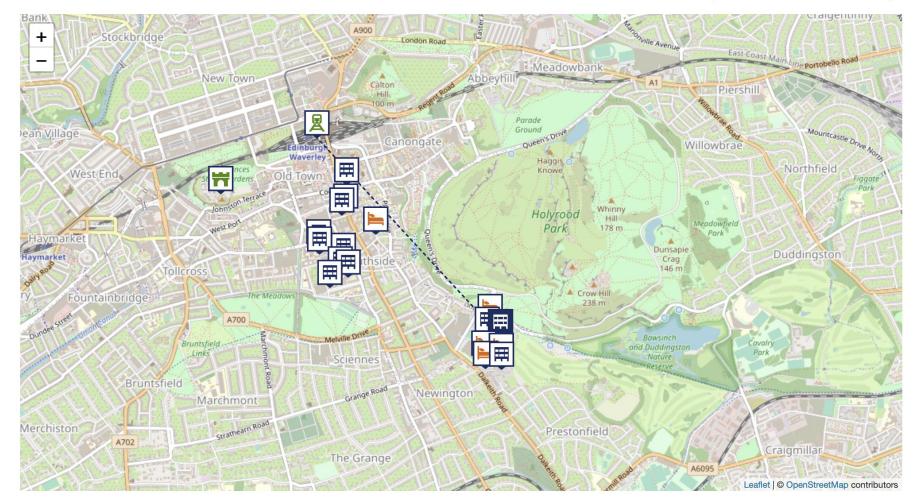




# Location

Approx walking times







# **The School of Informatics**





- ~500staff, inc.:
  - ~150Academicstaff
  - ~230 Research staff
- ~2050students:
  - ~1180Undergraduates
  - ~400MScStudents
  - ~480PhDStudents
- Research income ~£22 Myr
- MostresearchpowerintheUK
- Largenumber of startups and spinouts







# **Research in Informatics**

happens across six institutes



Artificial Intelligence and its Applications Institute



Institute for Adaptive and Neural Computation



Institute for Computing Systems Architecture

ilcc

Institute for Language, Cognition and Computation



Institute of Perception, Action and Behaviour lfcs

Laboratory for Foundations of Computer Science







### ECSS 2023

23-25 October 2023 (Mon-Wed)

Edinburgh, Scotland

