

The Importance of Software Eco Systems in Europe

Presentation of a white paper produced by ERCIM

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What is ERCIM?



Founded in 1989 to connect the leading ICT institutes in Europe.

Contribute to a stronger role of Europe in ICT:

- by building a European-wide, open network of centres of excellence in ICT.
- by excelling in research, by acting as a bridge to applications, and by coordinating EU projects.
- by being internationally recognized as a major representative organisation in its field; the portal which gives access to all relevant ICT research groups in Europe.

ERCIM is the European host of W3C - the World Wide Web consortium.



Members









ERCIM is a consortium of leading European research institutions committed to information technology and applied mathematics.

























Our activities

Postdoctoral Fellowship Programme

- Open to PhDs, world-wide
- Over 750 fellowships awarded since 1990
- 12 months duration at an ERCIM institute (with possible extension)
- Includes exchange programme for a short visit in a second ERCIM institute (Research Exchange Programme)
- Competitive salary

ERCIM has helped me not only in shaping my career with a global level exposure but also opened new avenues for a world class research and network opportunity. ERCIM is a masterpiece program in its own way and enables researchers to expand their arms for a bright and fun filled research experience.



Nishu GUPTA
Former ERCIM Fellow





Our activities

Cor Baayen Award

Cor Baayen Young Researcher Award

- awarded every year to a promising young researcher in computer science and applied mathematics.
- created in 1995 to honour the first ERCIM President.
- consists of a cheque for 5000 Euro together with an award certificate.

Latest Winners:

2024: Nicola Messina

2023: Rianne de Heide

2022: Fabio Carrara

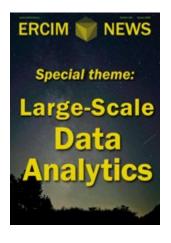
2021: Tomasz Kociumaka

See: https://www.ercim.eu/human-capital/cor-baayen-award



Our activities

ERCIM News









- Quarterly magazine
- Free subscription
- Published in print and online
- Referenced by dblp
- Each issue features a special theme
- About 120 articles published per year

See: https://ercim-news.ercim.eu



The Importance of Software white paper



for Informatics and Mathematics

Why a white paper on this subject?

- European Digital Sovereignty is important.
- Current efforts have a very hardware-first approach.
 - Software efforts tend to be focused on hardware needs.
- Most of the value is in fact depending on having control of the higher-level software eco systems.
- These eco systems have a significantly different business logic than the hardware ones.



- Software eco systems are agile and volatile.
 - One person with a PC can change the world and has done it.
- These initial efforts create communities and eco systems.
 - These are complex, evolving, organic structures they fork, they swerve ... but they produce.
 - No longwinded structured decision processes, as in harware development.
- The software these communities create forms the basis for industry.
 - No company can afford to develop everything by themselves they need good open source platforms to build on.



- Open Source communities are by many seen as not needing any funding.
 - People seem to think that it is volunters that have another day time job.
 - In some of the commission's writings it looks like Open Source software is created from thin air to be fair there are also good initiatives in the commission's writings.
- There are a lot of companies that support Open Source.
 - Often in a good way, but sometimes not we cannot rely on this.
- The funding needs to be agile.
 - There has to be funding in place when an idea is born otherwise the americans or chinese grab the lead.
- We need to build skills and new methods for software development.
 - Have you heard about AI?



- A comprehensive and targeted focus on the European software ecosystem.
 - Public funding for experimental research into software development as well as to the development and maintenance of production-grade commodity software.
 - No one-time investment this requires a continuous commitment.
 - New EU regulations on e.g., AI, sustainability, privacy, etc should be matched by corresponding and dedicated funding to software research, development, and maintenance – do we or don't we want our values to prevail world-wide?
 - Funding the promotion, integration, and maintenance of European open-source projects and eco systems to ensure retainment of "ownership" and know-how.



Software eco systems in Europe

We have the potential – we don't have the funding.

Do we want European values to prevail or not?

This is where that happens!



Further information

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