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EURO

Croatia NCC

10.6.2021

About Croatia NCC

- **7 partners, under the leadership of SRCE**
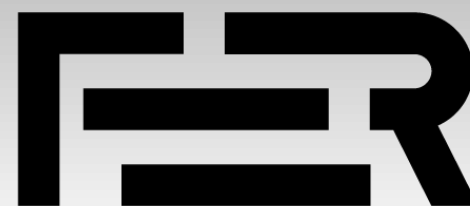
The competences of the NCC at a glance
Croatia, NCC 5

Competence category	Level of HPC readiness of users				
	Digitalization needed	**Digitally ready**	**HPC ready**	**HPC users**	**HPC champions**
Awareness creation	Curiosity level events, workshops	Conferences, workshops, lectures, hackathons			
Expert technical consultancy	Digital Transformation support	First-time users support, problem solving skills	Application expertise	Application porting, scale up, support skills	Industrial application development, optimization
Services and products	Digital assesment	Infrastructure provisioning + training + user support	Infrastructure provisioning + user support	Infrastructure provisioning + co-development + user support	Infrastructure provisioning + co-development + user support
Business & project consultancy	Project design starting from business needs of existing partners	Project design starting from business needs and pilots.	Project design starting from business needs	Project design starting from business needs and opportunities in industry 4.0	Project design upgrading current solutions with increased efficiency or new functionalities
Technological assessment and PoCs	Incubators, technological parks	Partnerships, incubators, technological parks	Partnerships, technological parks	Partnerships	Partnerships
Mastering the EU HPC ecosystem			co-participation on Euro-HPC and EU funded projects	co-participation on Euro-HPC and EU funded projects	co-participation on Euro-HPC and EU funded projects

Awareness creation

Popularization, general public, hackathons

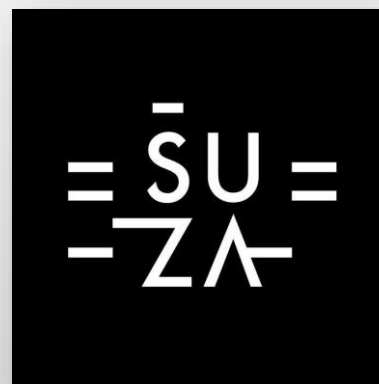- **Hackathons** -
  - robotics & AI/ML
  - LEGO FIRST

- **Workshops**

- **Popularization**
  - Open days at Institutions
  - Visits to schools

Expert technical consultancy

Chip design, optimized software, biomedicine, water capital

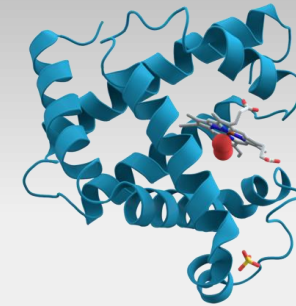- **Specialized chip development software optimization**

  - FPU for EPI processor
  - Multimedia, genomic, crypto, and automotive applications
  - EdgeAI

- **Rimac Nevera supercar development (CFD)**

- **Biomolecular research**

- **Climate modeling and sustainability of water capital**

Services and products

Infrastructure provisioning to academia & industry

- HPCaaS – HTC Cloud on OpenStack

- Institutes of hydrometeorology and seismology

- Digital transformation of education – SRCE, RITEH, HPC Academy

- Biomedicine – Xelia, MEDILS

- Engineering design – Rimac (design), Rolls-Royce (engine)

Business & project consultancy

Project design and execution

- Mostly through previously established contacts

- Partnering cofinanced projects under
  European Regional Development Fund (EFRR)
     ~100 ongoing projects

- **Integrated System for Protection against Cyber Fraud (HPDA with private partner)**

- **BigEVdata - IT Solution for BigData e-mobility analytics (HPDA with private partner)**

- Ad-hoc industrial projects

Technological assessment and PoC

- Startup incubators
- Student-based

- Technological parks
- STeP Ri

- Partnerships with industry

- Design of specialized hardware and optimizations for different platforms

- Sharing experiences on use cases and projects

- HPCaaS

- Exchange of experience on using ML/AI in HPC

- Exchange best practices in attracting companies to become HPC users and business models

Thanks!

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Contact person and details:
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