



NCC Montenegro

<https://eurocc.udg.edu.me>


EURO²



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Sanja Nikolic

EuroCC - Democratizing Access to Supercomputing



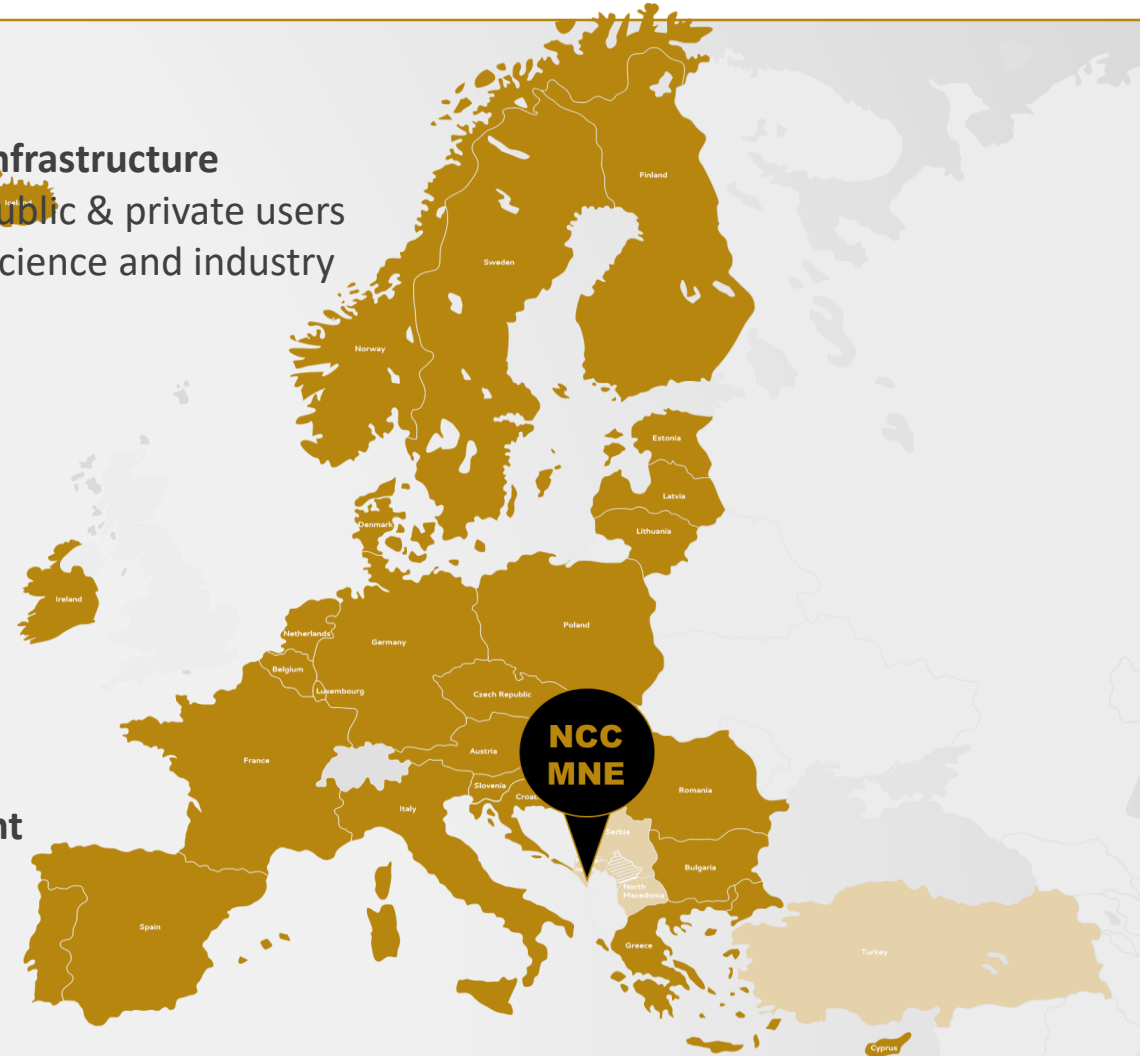
- Development of **EU world class supercomputing & data infrastructure**
- **Widen the use of supercomputing** to a large number of public & private users
- Support the development of **key HPC skills** for European science and industry



- Established/Running a network of **HPC National Competences Centers (NCCs)** in 33 European countries
- To increase awareness and competences on HPC/HPDA/AI and provide supercomputing infrastructure to **industry, academia and public administration**



- **Development of the national HPC ecosystem**
- **HPC/HPDA/AI competence mapping & skills development**
- **HPC/HPDA/AI training & service portfolio development**
- **HPC uptake & industry onboarding (especially SMEs)**
- **Access to EuroHPC supercomputers**



NCC Montenegro @ a glance



NCC governance

- **UDG** as a host University and Leading partner and **UCG** as Associated partner in EuroCC2
- **National reference point** for HPC/HPDA/AI-infrastructure/activities/services
- **23 members** focused on **HPC/HPDA/AI** awareness, upskilling and uptake



NCC infrastructure

- **Yotta** Advanced Computing
- **EuroHPC supercomputing access**
- Advanced **GPU hardware** and local **Data Centre**
- **Member of GRNET consortium** - new EuroCC HPC supercomputer **DEDALUS in Greece**



NCC service portfolio



- HPC+ **academic programs, professional trainings**, industry-specific and user-customized trainings
- Focusing on **industry uptake/SMEs**, technology transfer and new business development (Ag-Tech, Fin-Tech...)
- Developing service portfolio for **academic community** (R&D&I) and **public administration** (Digital Agenda, S3)

NCC collaboration model



- **Projects cross-collaboration (≈10)** for synergy effects, enhanced visibility and sustainable funding
- **NCCs cross-collaboration (≈15)** for joint training and industry events, capacity building and shared expertise
- **Key MNE stakeholders productive collaboration (≈20)** for private and public sector outreach and onboarding

HPC/HPDA/AI skills development @NCC MNE/UDG

HPC/AI academic/study programs

Faculty for information systems and technology

Bachelor 3+2 program (2 modules):

- Software development M1**
 - requirements analysis and system design
 - programming and agile development
 - system integration
- Digital transformation M2**
 - management of information technology
 - digital innovation of business processes
 - artificial intelligence, Blockchain





Artificial Intelligence
A new Master program at FIST-UDG



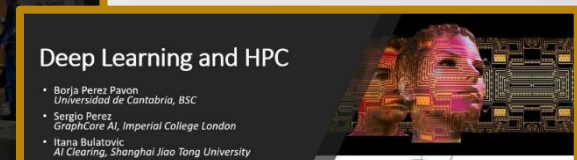
OPEN MIND ACADEMY, UDG

HPC/AI professional training/couching



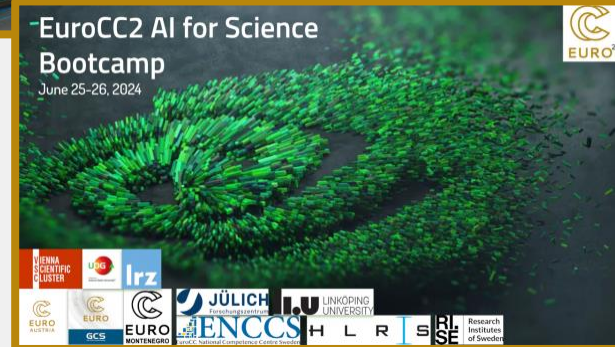
NCC Montenegro
Parallel computing course

Introduction | Distributed computing systems | Parallel Computing Overview
Programming models (MPI, OpenMP) | HandsOn



Deep Learning and HPC

- Borja Perez Pavon, Universidad de Cantabria, BSC
- Sergio Perez, GraphCore AI, Imperial College London
- Itana Bulatovic, AI Clearing, Shanghai Jiao Tong University
- Petar Velickovic



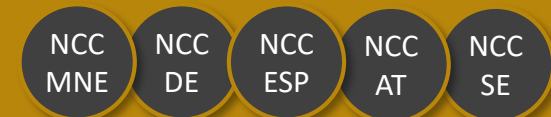
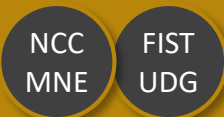
EuroCC2 AI for Science Bootcamp
June 25-26, 2024





- The first nationally accredited AI Master program @UDG,
- EuroCC- empowered/restructured Bachelor program @FIST,
- Introducing HPC/AI electives into interdisciplinary study programs

- Professional courses for industry, academia and public sector providing in-demand HPC/AI knowledge, technical upskilling and supercomputing hands-on sessions.



HPC/HPDA/AI skills development @NCC MNE/UDG

HPC/AI industry & technology-centric courses

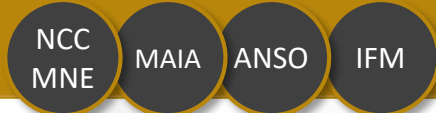


HPC/AI international & interdisciplinary lectures



- Technology-centric (HPC system architecture, Python, Parallel Programming, AI/ML/DL, Edge IoT, Computer Vision, NLP...) as well as industry domain-specific (S3: energy, health, agriculture, tourism) training portfolio.

- International lectures from NCC experts, esteemed professors, industry professionals and influential speakers providing a global perspective on innovative research/ technologies and AI/HPC advancements in various field.



HPC/HPDA/AI skills development @NCC MNE/UDG

HPC/AI academic panels, industry workshops and international lectures @ IT IEEE conference



- HPC/HPDA/AI workshops @ IEEE IT are organized every year under the widely acknowledged International IT Conference IEEE
- HPC/AI technologies and applications, study cases and industry cases presented to students, researchers and ICT professionals
- The conference includes academic lectures, industry workshops, round tables and conference papers presentations



Thank you

We wish you
successful training!



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