

CITIC

Ofertas de Trabajo de Otras Entidades

Post Doc position on advanced tools and libraries for exascale at University of Rome Tor Vergata. Plazo de solicitud: 18/05/2024

The Department of Civil and Computer Science Engineering at the University of Rome Tor Vergata, Italy (https://web.uniroma2.it/en) is accepting applications for a postdoctoral fellowship on advanced tools and libraries for exascale.

The project is the context of the EuroHPC project **EoCoE 3** (https://www.eocoe.eu/) on "Advanced tools & libraries for exascale, and their use in flagship applications" under the joint supervision of Prof. Salvatore Filippone and Prof. Valeria Cardellini.

The research activities will focus on the development of mathematical software libraries needed in the physics-driven computational models of lighthouse codes and the data processing during and after simulations.

The main objective in EoCoE3 is in extending the libraries to boost node-level efficiency, by exploiting at the best processors heterogeneity of high-end supercomputers, and scalability toward exascale.

The activities will also comprise a collaboration with the development of the flagship applications for Wind and Water simulations.

The duration of the appointment is for 12 months (with the possibility of 12 additional months based on the researcher's achievements) and the yearly gross salary is EUR 32.000,00.

The anticipated start date is July 1, 2024 or as soon as possible thereafter.

The requirements for application are:

- A doctoral degree in Computer Engineering, Computer Science, Computational Science, Mathematical Engineering or related field;
- Experience in scientific software development for High Performance Computing with

C/C++/Fortran;

- Knowledge of parallel programming using MPI and/or OpenMP;
- Knowledge of CUDA would be an advantage.

The application deadline is **Saturday May 18, 2024 at noon**.

Details on how to apply can be found at https://pica.cineca.it/uniroma2/f3-2024-0009/

Please contact us if you have any questions at @email and @email

Postdoc on efficient deep neural network training at Edinburgh. Plazo de solicitud: 14/05/2024

We are looking for a postdoc to undertake novel research at the efficient deep neural network training in the School of Informatics at the University of Edinburgh.

The Topic

The goal of this project is to develop novel techniques for training deep neural networks efficiently. This will involve generating data for training, sampling informative samples and designing data-efficient architectures for various vision models, and also vision-language models.

Project Team

The candidate will be based in Visual Computing Group (

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) and will be supervised by Dr. Hakan Bilen. There will be many collaborative opportunities within the Vision group ($\,$

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) as well as across the School of Informatics (which includes faculty working on machine learning, computer vision, NLP, speech processing, and social computing) and as well as with the University of Oxford and Bristol.

Your skills and attributes for success

- · PhD degree (or nearing completion)
- · A strong background in machine learning and/or computer vision
- · Publications at top venues in CV or/and ML (e.g., CVPR, ECCV, ICCV, NeurIPS, ICLR, ICML)

- · Excellent programming skills in Python, PyTorch, Tensorflow
- · Ability to work independently and manage own academic research and associated activities.
- · Excellence in written and oral communication, analytical, and time management skills.

Location

The School of Informatics was ranked #1 in the UK for research power in Computer Science and Informatics Times Higher Education ranking, based on the 2021 Research Excellence Framework (REF). We are one of the top six institutions in Europe for AI according to CSRankings, and the highest-ranked UK institution. The School is an active Unit in the European Laboratory for Learning and Intelligent Systems (ELLIS). Edinburgh is a highly attractive city to live in. It is walkable, enjoys proximity to nature, and features a world-class cultural scene. It was ranked 1st in the 2022 Time-Out Index of the best cities in the world.

How to apply

Apply before 14th May 2024

This post is full-time (35 hours per week) and fixed term for 12 months (with possibility of extension by another 12 months).

Contact details for enquiries:

Dr. Hakan Bilen

@email

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You can find more information about the role, including details on how to apply, here: https://urldefense.com/v3/__https://elxw.fa.em3.oraclecloud.com/hcmUI/CandidateExperience/1KvNu-

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Doctoral researcher position available at Tampere University, Finland. Plazo de solicitud: 30/04/2024

We are now recruiting a doctoral researcher within the European Commission funded ISLANDS doctoral training network, focusing on the timely paradigm of 5G/6G cellular positioning and SLAM (simultaneous localization and mapping). The post has really appealing salary benefits, and offers opportunities to also spend time with Nokia Bell Labs, Germany, and UCSD, US – with all costs covered.

Direct link to apply is: https://tuni.rekrytointi.com/paikat/?o=A_RJ&jgid=3&jid=2247

Tenure-Track Faculty Position in Computer Engineering @ Simon Fraser University. Plazo de solicitud: 20/05/2024

The School of Engineering Science at Simon Fraser University (SFU), British Columbia, Canada, invites applications for a tenure-track faculty position in Computer Engineering at the rank of Assistant Professor. The position covers computer systems, including computer architecture, VLSI and circuit design, hardware accelerators, embedded systems, high-performance computing, operating systems, compilers and synthesis, software engineering, and hardware security.

The ideal candidate is expected to possess and demonstrate the following qualifications:

- Ph.D. in Electrical, Computer Engineering, Computer Science, or related areas
- Proven track record of developing and teaching engineering courses at undergraduate and graduate levels
- Demonstrated capacity for research excellence and experienced with student supervision
- Demonstrated ability to bridge disciplines across Engineering Science
- Demonstrated commitment to diversity, equity, and inclusion
- Eligibility to register as a Professional Engineer with Engineers and Geoscientists BC (EGBC)

The School of Engineering Science offers programs that are nationally accredited by the Canadian Engineering Accreditation Board (CEAB). Our programs are among the most sought- after engineering programs in Canada. The school prides itself in its excellent research and newly updated teaching facilities, as well as high-quality students. SFU is located in Metro Vancouver, which is rated one of the most livable areas in North America. SFU offers competitive salaries, excellent benefits, and a collegial and vibrant work environment.

Faculty salaries at SFU are based on the salary scales defined by the collective agreement between the University and the SFU Faculty Association. A reasonable estimate of the salary range at the Assistant Professor rank is \$101,187 – \$128,975 (subject to experience). PhD candidates with solid indication of imminent completion may be hired at the rank of Instructor and will be promoted to the rank of Assistant Professor upon completion of the PhD. A reasonable estimate for salary range if the successful candidate will be starting as an Instructor is \$95,012 – \$101,187.

Full consideration will be given to applications received by: May 20, 2024.

To apply, please submit to the online application system: http://www.sfu.ca/engineering/job-postings.html

- Curriculum vitae
- Research statement
- Teaching statement
- EDI statement regarding teaching and research
- Names and contact information of three referees.

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

Simon Fraser University is an institution whose strength is based on our shared commitments to diversity, equity and inclusion. Diversity is an underlying principle of our Strategic Vision, which pledges SFU to "foster a culture of inclusion and mutual respect, celebrating the diversity reflected among its students, faculty, staff and our community." SFU is committed to ensuring no individual is denied access to employment opportunities for reasons unrelated to ability or qualifications. Consistent with this principle, SFU will advance the interests of underrepresented members of the work force, including Indigenous peoples, persons with disabilities, racialized persons and women; embrace gender and sexual diversity; ensure that equal opportunity is afforded to all who seek employment at the University; and treat all employees equitably. Candidates that belong to underrepresented groups are particularly encouraged to apply.

Personal information that forms part of an application is collected under the general authority of the Freedom of Information and Protection of Privacy Act, applicable University Policies, and the SFUFA/SFU Collective Agreement. For further details see the full Collection Notice: https://www.sfu.ca/vpacademic/academic-careers/current-openings.html

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Doctoral/PhD position in Multi-Model Federated Learning with Fairness Guarantees

We offer a new PhD position on "Multi-Model Federated Learning with Fairness Guarantees", starting in Fall 2024 at Avignon University, Avignon, France.

Brief description:

Federated Learning (FL) enables collaborative learning between multiple clients while preserving the confidentiality of their data. In most federated learning systems, all clients train the same learning task, but with the growth of federated learning applications, it has become increasingly necessary to use concurrent learning, which trains several tasks in parallel while sharing client data for training. This opens up a number of interesting problems that have been studied in the case where there is only one model to train. One of the most important questions is how to improve the efficiency of federated learning in the presence of multiple tasks, and how to ensure that all simultaneous training tasks achieve high accuracy efficiently while maintaining a level of fairness between tasks. The security issue will be also studied in the case of multi-model federated learning. A full description of the thesis subject is available at the following address

https://www.dropbox.com/scl/fi/6w75t5a9n768ds3y05x6m/Phd-2024.pdf?rlkey=ndszpzjk48u2ns662ffz5edgg&dl=0

Partners and Study periods: In this thesis, we will be working closely with Carnegie Mellon University (Pittsburgh, USA) and Singapore University of Technology and Design (Singapore). The PhD student will be based in Avignon, within the Computer Science Laboratory of Avignon University and will benefit from a 6-month internship with each partner during the thesis period.

Profile:

We are looking for motivated applicants with a Master's degree (or equivalent) in Computer Science and Electrical Engineering, or a related field. Candidates should be attracted by one or two of these areas: machine learning, distributed learning, data analysis, algorithms and networks. Candidates who are more motivated to explore both theoretical and applied aspects are an asset. Good written and spoken English.

Contact

Rachid Elazouzi

2-Year Post-doctoral Researcher Position in IoT-based Security for Critical Infrastructure at Uppsala University. Plazo de solicitud: 30/04/2024

The Department of Electrical Engineering offers a two year post doc position in IoT-based Security for Critical Infrastructure. Today's society is dependent on infrastructure such as the electricity grid, communication networks or transport infrastructure. Thus, it is crucial that such critical infrastructure is protected against sabotage both physically – and in conjunction with digitalisation of infrastructure – digitally. In this project, we investigate the use of IoT (internet of things)-based solutions to mitigate sabotage and intrusion in critical infrastructure.

Duties:

The main duties are to conduct research in security of critical infrastructure with the help of IoT-based solutions and, for example, distributed machine learning methods. The tasks include design, implementation and analysis of solutions as well as publication of the research results at conferences and in journals. The duties may also include teaching (max. 20 %) and contributing to the design of a lab for demonstrating cybersecurity.

Requirements:

- The applicant must hold a Ph.D. degree or a foreign degree equivalent to a Ph.D. degree in electrical engineering, engineering physics, or computer science. The degree needs to be obtained by the time of the decision of employment. Those who have obtained a PhD degree three years prior to the application deadline are primarily considered for the employment. The starting point of the three-year frame period is the application deadline. Due to special circumstances, the degree may have been obtained earlier. The three-year period can be extended due to circumstances such as sick leave, parental leave, duties in labour unions, etc.
- Experience in at least one of the following or related areas: Sensor networks andIoT, distributed machine learning, (cyber)security for critical infrastructure, anomaly detection, or security of smart grids.
- Experience in programming.
- Very good oral and written proficiency in English.
- We emphasize personal qualities such as good collaboration and communication skills with other researchers and research groups. You should be purposeful, structured, and able to work effectively both individually and in groups.

About the employment:

The employment is a temporary position of 2 years according to the central collective agreement. Full time position. Starting date as agreed. Placement: Uppsala

Environment:

Sweden is a fantastic place for living and working and always among the top 10 countries in the world's happiness index. Swedes are friendly and speak excellent English. The quality of life is high, with a strong emphasis on outdoor activities. The Swedish working climate emphasizes an open atmosphere, with active discussions involving both junior and senior staff. Spouses of employees are entitled to work permits. Healthcare is free after a small co-pay and Uppsala University subsidizes athletic costs, such as a gym membership. The parental benefits in Sweden are among the best in the world, including extensive parental leave (for both parents), paid time off to care for sick children, and affordable daycare.

At the department of Electrical Engineering you will find a stimulating and international work environment with many interesting projects. We collaborate with Swedish companies as well as the public sector. We are looking forward to your application!

Please apply latest on April 30 at

https://urldefense.com/v3/__https://uu.varbi.com/en/what:login/type:job/jobID:712170__;!!D9dlbcaDpE5TNLYerM2bzAe9QDIyiSj2nuU-mdPcKCqKQmX8W8ovJI 3SxnYSLyGGmjmmY\$

Assistant Professor in Connected and Autonomous Vehicles at Coventry University (UK). Plazo de solicitud: 16/04/2024

The Centre for Future Transport and Cities at Coventry University is looking for an enthusiastic and ambitious researcher with expertise in developing AI/ML models to enhance the connectivity and security of wireless networked systems, with a focus on Connected and Autonomous Vehicles (CAVs) and Unmanned Aerial Vehicles (UAVs).

Position: Assisted Professor in Connected and Autonomous Vehicles

Department: Centre for Future Transport and Cities of Coventry University

Location: Coventry, United Kingdom

Closing date: 16 April 2024

Salary range: £44,263.00 - £63,029.00 per annum

Mode: Permanent, Full Time

Job details can be found here

Apply for this job here

For anyone wishing to find out more information about the Research Centre and the job please contact Professor Soufiene Djahel at @email

Multiple Postdoctoral and Engineering Positions at KAUST

The Accelerated Connected Computing Lab at KAUST is hiring Postdoctoral Research Fellows and Research Engineers to work in the following areas:

- 1. Networked accelerator infrastructure for near-edge offload: exploring a lightweight hostless approach to virtualised FPGA accelerators for distributed streaming applications in the context of smart cities. Part of a collaboration with TU Darmstadt and ETH Zurich. Wider impact possibilities through the NEOM project in Saudi Arabia. Experience with networking on FPGAs, PCIe, partial reconfiguration required.
- 2. Edge Accelerator SoC for Streaming Intelligence: an impact project demonstrating a lightweight machine learning accelerator coupled with programmable SoC for distributed intelligence in smart cities. High potential impact possibilities through a variety of Saudi Arabian initiatives including recently announced Semiconductor investments. Experience with SoC design and integration, RTL-to-GDS, tape-out, and test.

Both postdoctoral fellows (with more of a focus on novelty and publishing outcomes), as well as research engineers at different levels (post-Masters or PhD, focused on impact outcomes) are welcome.

KAUST is a postgraduate-only research university on the shores of the Red Sea, just one hour from Jeddah International Airport. Postdocs and engineers enjoy a generous salary and accommodation package a world class campus with ample recreational facilities and a private beach. KAUST's new impact strategy promises the opportunity to take ideas from research through proof of concept, to real world impact through well-supported pathways in a burgeoning semiconductor sector seeing significant investment.

Please get in touch by email if you are interested, outlining your relevant experience and interest.

Suhaib A Fahmy PhD DIC

Associate Professor | Computer Science

Computer, Electrical and Mathematical Sciences and Engineering | KAUST @email |

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PhD/Postdoc position at CentraleSupélec/IETR in Rennes

Side-Channel Resistant DNN Hardware Accelerators

https://www.ietr.fr/sites/www.ietr.fr/files/medias/files/ATTILA PhD PD call 2024.pdf

The positions are framed in the ANR JCJC project ATTILA (young investigators grant from the French national research agency). You will integrate the IETR laboratory in Rennes and work with members from the ASIC team and the SUSHI of IRISA/Inria. We are part of a larger collaborative environment with researchers in Rennes and Nantes working on Deep Learning (DL) hardware and hardware/software security.

Objectives

The main goal is to investigate remote/local side-channel vulnerabilities of DL systems in heterogeneous reconfigurable platforms (MPSoC-FPGAs) and to design secure accelerators against SCA attacks.

We welcome candidates with different backgrounds and interests, e.g., on hardware and architecture (FPGAs, hardware security, secure accelerators and microarchitecture, microcontrollers) or on computer science/mathematics (sidechannel analysis, cryptanalysis, artificial intelligence). Depending on the background, the research directions to explore include, but are not limited to:

- DNN implementation, side-channel evaluation, and discovery of vulnerabilities.
- Implementation of countermeasures.
- Advanced side-channel analysis techniques and evaluation methodologies.

Duration: Ph.D. full 3-year thesis, and Postdoc 2 years with possibility of extension.

Start date: Flexible during 2024, ideally Ph.D. Oct./Nov., and Postdoc as soon as possible

To apply please send an email to the contacts indicated below with the following information:

- Your CV
- Reference letter/s from previous supervisors
- Copies/links to reports/papers/repositories showing your experience
- Postdoc:
 - Motivation letter and brief research statement (4 pages max)
 - Your Ph.D. thesis manuscript
- Ph.D.:
 - Motivation letter
 - Bachelor/Master transcripts

Please do not hesitate to contact us for further details and information.

- Rubén Salvador: @email
- Maria Méndez Real: @email
- Jean-Christophe Prévotet: @email

Deadline: Interviews will start as applications arrive and run until filling the positions.

Three Fully Funded PhD Positions in Custom Computer Architecture and Hardware Acceleration with Focus on Reconfigurable Computing at McMaster University - Canada

I am currently recruiting for three fully funded PhD positions to join my lab in the Department of Electrical and Computer Engineering at McMaster University , with a start date in September 2024 or earlier. My team works on exciting topics in custom computer architecture, hardware acceleration, reconfigurable computing, and asynchronous circuits, with applications in machine learning and neurotechnology. We prototype our innovations on reconfigurable devices and fabricate silicon microchips.

More information for future graduate students can be found here

https://www.eng.mcmaster.ca/future-students/future-graduate-students

https://gs.mcmaster.ca/future-students/

I'm seeking creative and motivated students with an outstanding academic record and strong skills in computer architecture and digital hardware design. While having a master's degree is highly advantageous, exceptional candidates without one will still be considered, particularly for our direct PhD program. Industrial experience and publications are a plus.

Interested candidates should send their CV and transcripts to my email (ameer[at]mcmaster[dot]ca) prior to submitting their formal application to accelerate the selection process. Applications will be reviewed once they are received, on an ongoing basis, until all positions are filled.