

## ΑΝΑΡΤΗΤΕΑ ΣΤΟ ΔΙΑΔΙΚΤΥΟ



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ  
ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ, ΕΡΕΥΝΑΣ ΚΑΙ ΘΡΗΣΚΕΥΜΑΤΩΝ  
ΓΕΝΙΚΗ ΓΡΑΜΜΑΤΕΙΑ ΕΡΕΥΝΑΣ ΚΑΙ ΤΕΧΝΟΛΟΓΙΑΣ

**ΙΔΡΥΜΑ ΤΕΧΝΟΛΟΓΙΑΣ ΚΑΙ ΕΡΕΥΝΑΣ  
ΙΝΣΤΙΤΟΥΤΟ ΠΛΗΡΟΦΟΡΙΚΗΣ**

Ταχ. Διεύθυνση: Ν. Πλαστήρα 100  
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Ηράκλειο 9-5-2019

**Call for expression of interest for one (1) position of Hardware Digital Designer (part-time) with  
University MSc in Computer Science or Computer Engineering,  
in the Institute of Computer Science (ICS)  
Foundation for Research and Technology – Hellas (FORTH)**



**Position(s):** one (1) position for Hardware Digital Designer (part-time) in the EuroEXA project

**Project:** EuroEXA (GA:754337), funded under H2020 - FET.

**Duration:** 1/7/2019-31/12/2019, 6 months with possibility of extension

**Location:** Heraklion, Crete, Greece

**Opening date:** 9/5/2019

**Closing date:** 24/5/2019

**Reference:** "Projects-EuroEXA\_part\_time\_May2019"

**Description**

We seek one part-time Hardware Digital Designer for our team. The candidate will participate in the R&D activities of FORTH in the context of the project EuroEXA: Co-designed Innovation and System for Resilient Exascale Computing in Europe: From Applications to Silicon. EuroEXA brings a holistic foundation from multiple European HPC projects and partners.

We co-design a balanced architecture for both compute- and data-intensive applications using a cost-efficient, modular-integration approach enabled by novel inter-die links and the tape-out of a resulting EuroEXA processing unit with integration of FPGA for data-flow acceleration. We provide a homogenised software platform offering heterogeneous acceleration with scalable shared memory access and create a unique hybrid geographically-addressed, switching and topology interconnect within the rack while enabling the adoption of low-cost Ethernet switches offering low-Latency and high-switching bandwidth.

Working together with a rich mix of key HPC applications from across climate/weather, physics/energy and life-science/bioinformatics domains we will demonstrate the results of the project through the deployment of an integrated and operational peta-flop level prototype hosted at STFC. Supported by

run-to-completion platform-wide resilience mechanisms, components will manage local failures, while communicating with higher levels of the stack. Monitored and controlled by advanced runtime capabilities, EuroEXA will demonstrate its co-design solution supporting both existing pre-exascale and project-developed exascale applications.

#### **Required qualifications:**

- University MSc degree in Computer Science or Computer Engineering.
- Physical presence at FORTH, Heraklion, Crete for the duration of the position.
- Fluent knowledge of English.
- Experience with network protocols and their design and implementation in FPGAs
- Experience with the implementation of network interface primitives for user-level inter-process communications.
- Experience with Xilinx tools (Vivado chipscope, SDK, etc) and integration for FPGA SoCs
- Willingness and ability to work cooperatively within a team, to learn, and to adapt to the projects.
- Demonstrated experience in EU-funded project activities
- Names of at least two professional references

#### **Desired qualifications:**

Experience with test-driven development and validation

#### **Application Submission**

Interested candidates can submit their applications via <http://www.ics.forth.gr/jobs/en/> using the link "[Apply for the position](#)" under the announcement. Applications must include:

- Detailed CV, including qualifications and interests in the above areas, and proof thereof
- Scanned copies of academic titles

Promising candidates may be invited for an interview before a decision is made.

#### **Contact Information**

- For information and questions regarding the application and selection procedure, please contact: [webmaster@ics.forth.gr](mailto:webmaster@ics.forth.gr)
- For information and questions about the advertised position, the activities of the group, or the Institute, please contact Nikolaos Papadopoulos ([nickpap@ics.forth.gr](mailto:nickpap@ics.forth.gr))

#### **Selection Announcement**

The result of the selection will be announced on the website of ICS-FORTH. Candidates have the right to appeal the selection decision, by addressing their written objection to the ICS secretariat within five (5) days since the results announcement on the web. They also have the right to access (a) the files of the candidates as well as (b) the table of candidates' scores (ranking of candidates results). All the above information related to the selection procedure will be available at the secretariat of ICS-FORTH in line with the Hellenic Data Protection Authority. Access to personal data of co-candidates shall be limited to personal data (and relevant data) and supporting documents which have been the basis of the evaluation of the candidates for the specific post(s). Prior to the announcement of the personal data and/or documents of the co-candidates to the applicant, FORTH will inform the data subjects in an appropriate way.

FORTH is compliant with all legal procedures for the processing of personal data as defined by the **Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data**.

FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law.

FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one's legitimate legal rights' as defined in the Regulation EU/2016/679 and/or in national law. We inform you that under the **Regulation EU/2016/679** you have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws.

We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at [dpo@admin.forth.gr](mailto:dpo@admin.forth.gr).

You have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.