

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
70013 Ηράκλειο Κρήτης

Αρ.Πρωτ. :3601
Ηράκλειο : 21-11-2018

**Call for expression of interest for two (2) positions of Research Engineers
in the Institute of Computer Science (ICS)
Foundation for Research and Technology – Hellas (FORTH)**



Position(s): two (2) positions Research Engineer
Project: VISORSURF, GA736876, funded under Horizon 2020
Desired starting date: January 1st, 2019
Duration: 8 months with the possibility of extension
Location: Heraklion, Crete, Greece
Opening date: 21/11/2018
Closing date: 06/12/2018
Ref. : Visorsurf-01-January2019

Description

The candidate will be responsible for designing and implementing the VISORSURF programming interface (API), its transformation (compiling) to controller directives and their relay within the controller network. (Cf. www.visorsurf.eu for definitions). This API and middleware, clearly specified in UML, will expose the HSF functionality in the form of parametric virtual functions, each corresponding to a metasurface capability (EM steering, absorption, polarization & non-linear response). The compiler is an HSF-external software service that translates the selected functions to

spatiotemporal actuation directives for the HSF controller network. The relay of these commands will resolve issues of medium access control, routing, and packet format definition. The metrics of performance are: i) the achieved coverage (i.e. the percentage of successfully informed control nodes per packet of directives), ii) the HSF programming speed (i.e. the time required to achieve this coverage), iii) the rate of packet collisions (tantamount to the energy-efficiency of the networking scheme), iv) the robustness against noise and interference, and v) minimal computational resources (yielding lower fabrication cost per control node and simpler hardware in WP3). Individual tasks will include:

- Definition of the HSF programming interface and the underlying virtual functions.
- Specification of the Compiler middleware, that will translate API commands to HSF controller node actuation directives.
- Network-level modeling and simulation of HSF controller networks. Incorporation of any existing state-of-the-art networking approach available.
- Evaluation via prototype measurements in a specially designed testbed.

Prior experience in the field, ability to work in a team and to take initiative and ability to communicate with people across scientific disciplines is required.

● **Required qualifications:**

- MSc in Computer Science and/or Engineering or related fields.
- BSc in Computer Science.
- Excellent programming, testing and debugging skills.
- Prior work experience in the Telecommunication and Network field.
- Excellent knowledge of Computer Networks (TCP/IP stack, switching, routing) and Linux systems
- Excellent oral and written English skills
- Good research experience: at least 4 publications in conferences or journals in the field of Computer Networks
- Physical presence at FORTH, Heraklion, Crete for the duration of the position

● **Desired qualifications:**

- Solid experience and excellent programming skills in Python, C, C++, JavaScript, and Java.
- Solid experience with relational databases (e.g PostgreSQL).
- Excellent knowledge of versioning tools (e.g subversion, git)
- Solid experience with giving technical presentations in Computer Networking conferences
- Experience and knowledge of using Internet Measurement platforms
- Experience as a teaching assistant in the field of Computer Networks

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
- Scanned copies of academic titles
- Scanned copies of any document referring to the required qualifications

Contact Information:

- For information and questions regarding the application and selection procedure, please contact Xenofontas Dimitropoulos (fontas@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.

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.