

STATEMENT

**on the competition for the academic position “Associate Professor”
in professional field**

**4.6 Informatics and Computer Science (Embedded and Autonomous Systems),
at Sofia University “St. Kliment Ohridski”,
Faculty of Mathematics and Informatics,**

**by Assoc. Prof. Dimitar Georgiev Dimitrov,
Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”,
appointed to the academic jury for this competition by the Rector of SU in accordance
with Order RD 38-497/19.10.2020**

1. Competition details

The competition was announced in State Gazette No.74 / 21.08.2020. A single candidate has submitted an application for this competition: Assist. Prof. Ioannis Parmenion Patias, PhD, Department of Computer Informatics at Faculty of Mathematics and Informatics, Sofia University “St. Kliment Ohridski”.

2. Short biographical data

In 1993 Ioannis Parmenion Patias received a Master of Science degree in Computer Science at Higher Institute of Mechanical and Electrical Engineering of Sofia (now Technical University of Sofia) and acquires the qualification of “Electronics and Automation Engineer”. In 2001 he acquired his PhD degree in 02.21.04 Computer Systems, Complexes and Networks with a dissertation on “Methods and tools based on descriptive logic for knowledge representation in decision support systems”. In 2009 he received a certificate in Professional Project Management, and in 2013 – a Master’s degree in Business Administration.

Ioannis Patias began his teaching career in the period 2000-2008 as a part-time lecturer at various technological educational institutes in Greece, as well as a guest lecturer at the Technical University of Sofia. In 2014 he continued teaching at FMI at Sofia University - first as a part-time lecturer, and in 2016 as a Assist. Prof. at the Computer Informatics department.

In parallel with the teaching, the candidate develops consulting and management activities in the period 1995-2019.

3. General evaluation of submitted publications

Assist. Prof. Ioannis Patias, PhD, has a total of 32 publications. For participation in the competition for the academic position of “Associate Professor” are presented 11 publications from the period 2016-2020:

- habilitation thesis - monograph in English;
- two collective monographs in Bulgarian, which are not presented as the main habilitation work;
- 6 scientific papers. The candidate is the sole author of one of them, while all other 5 papers are co-authored with one author. One of the scientific articles is in an edition with an impact factor, and another 3 are in editions with an SJR factor;
- two book chapters in Bulgarian.

4. Scientific contributions

Assist. Prof. Ioannis Patias, PhD, has 6 scientific contributions to the publications submitted for participation in the competition:

- A four-point list is proposed for the requirements analysis in the cloud federation.
- Two architectures are compared in decisions for compliance and patient engagement. A REST-based architectural style was embedded in a three-tier architecture and then compared to a federation model in the cloud.
- Processes targeting patient and all stakeholder participation are proposed. Specific interventions are proposed in the direction of the use of big data in the healthcare sector, which will help to create new operational and business models.
- Methods have been proposed to evaluate the idea of taxation of companies using robots.
- A mobile application has been developed to help the patient adhere to the prescribed therapy.
- Two solutions have been developed for automated localization of vehicles and prioritization of buses for public transport through a corridor for fast transit bus. The solutions consist of a recognition subsystem with a component that is placed on the buses using a transmitter and receiver, as well as a component placed on the traffic lights.

5. Educational activities

The teaching experience of Assist. Prof. Ioannis Patias, PhD, at FMI includes the following courses:

- Artificial Intelligence;
- Knowledge-Based Systems;
- E-Business Systems;
- Databases;
- Database Management Systems;
- Robotic Systems Design;
- Risk Management.

The candidate has advised 7 Master's students who have successfully defended their theses.

Prior to joining FMI Ioannis Patias has taught Programming and Operating Systems courses.

6. Citations

The provided citations report includes evidence for a total of 11 citations of 4 of his publications. All citing publications were written in the period 2018-2020.

7. Assessment of the personal contribution of the candidate in the collective publications

In the scientific publications submitted for the competition, Ioannis Patias is either the first author or the sole author.

8. Critical remarks and recommendations

I have no critical remarks either regarding the results contained in the publications or regarding the design of the materials for the competition. I would recommend to the candidate a greater orientation towards independent publications.

9. Personal impressions

I know Asist. Prof. Ioannis Patias, PhD, since 2016, when he joined FMI. He is competent and responsible lecturer respected by both his colleagues and students.

10. Conclusion

Based on the review of the documents and scientific publications submitted for this competition, as well as on the analysis of their significance and the theoretical and applied contributions, I confirm that all requirements of ZRASRB, PPZRASRB, and PURPNSZADSU for acquiring the academit position "Associate Professor" in the scientific

and professional field of this competition are met. More specifically, the candidate satisfies the minimal national requirements of the professional field.

Based on the above, I hereby **recommend** to the scientific jury to propose to the competent authority of the Faculty of Mathematics and Informatics at Sofia University “St. Kliment Ohridski” to elect Assist. Prof. Ioannis Parmenion Patias, PhD, to the academic position “Associate Professor” in professional field 4.6 Informatics and Computer Science (Embedded and Autonomous Systems).

December 11th, 2020

Sofia

Prepared by:

/Assoc. Prof. Dimitar Dimitrov/