



## Decisions of the Council of the Doctoral School of Applied Informatics and Applied Mathematics

### Decison No. 205.

The Council of the Doctoral School of Applied Informatics and Applied Mathematics approves the subjects of the complex exams due in January 2025 and the proposals made to the examination boards as follows:

**Decision No. 205/1.: Pesti Richárd:** „*Hatékony mobil robot póz becslő algoritmusok fejlesztése referencia jel hiányos környezetben*”

**Supervisor:** Dr. Odry Ákos, Dr. Sarcevic Péter

**1. Subject:** Beágyazott mobilrobot technika (Dr. Odry Péter)

**2. Subject:** Fuzzy következtetési rendszerek (Dr. Takács Márta)

**Chairman:** Prof.Dr. Fullér Róbert, SzE

**Decision No. 205/2.: Puskás Melánia:** „*Élettani rendszerek paraméter-becslése és szimulátor fejlesztése*”

**Supervisor:** Dr. Drexler Dániel

**1. Subject:** Biostatistikai és szabályozástechnikai módszerek alkalmazása kóréletteni modellezésben (Dr. Ferenci Tamás)

**2. Subject:** Regressziós modellek orvosbiológiai alkalmazásai (Dr. Ferenci Tamás)

**Bizottsági belső tag:** Dr. Tar József

**Chairman:** Prof.Dr. Fullér Róbert, SzE

**Decision No. 205/3.: Pusztaházi Luca Sára:** „*Towards Explainable Artificial Intelligence: Implementing Continuous Logic and Multi-criteria Decision Tools in Machine Learning Models*”

**Supervisor:** Dr. Eigner György, Dr. Csiszár Orsolya

**1. tárgy:** Neuro-symbolic hybrid artificial intelligence - (Lecturer: Csiszár Orsolya, examiner Takács Márta)

**2. tárgy:** Fuzzy-neurális rendszerek (Prof.Dr. Fullér Róbert, SzE)

**Chairman:** Dr. Tar József

**Decision No. 205/4.: Szilágyi Zoltán Győző:** „*Ipari robot-rendszerek hatékonyságának növelése kevert valóság módszerek alkalmazásával irányítása*”

**Supervisor:** Dr. Galambos Péter, Dr. Széll Károly

**1. Subject:** Robot irányítás és modellezés (Dr. Tar József)

**2. Subject:** Modern orvosi robotok (Dr. Haidegger Tamás)

**Chairman:** Prof.Dr. Fullér Róbert, SzE

**Decision No. 205/5.: Mohammad Amin Rezaei:** „*Implementation of Real-Time Deep Learning Approaches for Reliability Forecasting and Analog Fault Detection Technique in Multilevel Inverter*”

**Supervisor:** Dr. Felde Imre, Dr. Amir Mosavi

**1. Subject:** Deep machine learning methods (Dr. Kertész Gábor)

**2. Subject:** Fuzzy-neurals systems (Dr. Fullér Róbert)

**Chairman:** Dr. Tar József



**Decision No. 205/6.:** **Sina Faizollahzadeh Ardabili:** „*Proposing an Evaluation Metrics for Deep Learning Methods used Energy Systems*”

**Supervisor:** Dr. Felde Imre, Dr. Amir Mosavi

**1. Subject:** Deep machine learning methods (Dr. Kertész Gábor)

**2. Subject:** Fuzzy-neural systems (Dr. Fullér Róber, SzE)

**Chairman:** Dr. Tar József

**Decision No. 205/7.:** **Gerse Ágnes:** „*Adatvezérelt modellezési és optimalizálási módszerek alkalmazási lehetőségei az energetikai rendszerelemzés területén*”

**Supervisor:** Dr. Dineva Adrienn, Dr. Fleiner Rita

**1. Subject:** Az optimális szabályozás alapjai (Dr. Tar József)

**2. Subject:** Energetikai rendszerek számítógépes modellezése és optimalizálása (Dr. Kádár Péter)

**Chairman:** Prof.Dr. Fullér Róbert, SzE

**Decision No. 205/8.:** **Hamed Tabrizch:** „*Energy-Aware Resource Management in Serverless Environments Using Deep Reinforcement Learning*”

**Supervisor:** Dr. Amir Mosavi

**1. Subject:** Deep machine learning methods (Dr. Kertész Gábor)

**2. Subject:** Fuzzy-neural systems (Dr. Fullér Róbert, SzE)

**Chairman:** Dr. Tar József

**Decision No. 205/9.:** **Murat Kozhanov:** „*Expanding the Role of Artificial Intelligence in Multidisciplinary Educational Program Design and Planning*”

**Supervisor:** Dr. Amir Mosavi, Dr. Eigner György

**1. Subject:** Deep machine learning methods (Dr. Kertész Gábor)

**2. Subject:** Fuzzy-neural systems (Dr. Fullér Róbert, SzE)

**Chairman:** Dr. Tar József

**Decision No. 205/10.:** **Syedmilad Mousavi:** „*Modeling and Analyzing the efficacy of three anti-angiogenic drugs on treatment of solid tumors using 3D computational modeling and deep learning*”

**Supervisor:** Dr. Amir Mosavi

**1. Subject:** Deep machine learning methods (Dr. Kertész Gábor)

**2. Subject:** Application of biostatistical and control engineering methods in pathophysiological modeling (Dr. Ferenci Tamás)

**Chairman:** Prof. Dr. Fullér Róbert, SzE

**Decision No. 205/11.:** Doctoral student Mera Saulaiman is in the special position of completing the first two semesters as a correspondence student, and was then awarded the Stipendium Hungaricum scholarship, so she continued her studies in this course. In order not to lose the research of the first two semesters, she continued her studies in the doctoral school with the third semester, while this was only considered the first semester in the case of the Stipendium Hungaricum scholarship. In the doctoral school, she fulfilled the conditions necessary for the issuance of the absolatory by the summer of 2024, so the DI issued her the absolatory. However, it turned out that according to SH's procedure, she would have lost her scholarship, so she applied for its withdrawal in an official letter,



which was approved by the Rector. Reflecting on this, the Council of the Doctoral School of Applied Informatics and Applied Mathematics withdraws the already issued absolutory.

**Decision No. 205/12.:**

The AIAMDI DIT authorizes the change of supervisor requested in the application ("Iman\_El\_Nouri\_AIAMDI\_HU\_EN-3\_signed.pdf") signed by PhD student Iman El Nouri, current supervisor Dr. György Eigner and future supervisor Dr. Leitold Ferenc.<sup>1</sup>

**Decision No. 205/13.:** The AIAMDI DIT agrees that, based on the preliminary informal orientation of the head of the DI (correspondence of this can be read in the file "Mosavi Amir Vállalása Shreya.pdf") Dr. Mosavi Amir should transfer PhD student Shreya Anchila from BDI to AIAMDI, assuming 50% of her

<sup>1</sup>ÓBUDA UNIVERSITY DOCTORAL AND HABILITATION REGULATIONS

Budapest, 2023 (effective from September 19, 2023, version number 11, consolidated with the amendments)

A doktori iskola oktatói, témakiírói, témavezetői

12. §

(1) The lecturers of the doctoral school are the lecturers and researchers with a scientific degree who - on the recommendation of the head of the doctoral school - the council of the doctoral school (hereinafter referred to as DIT) deems suitable to carry out teaching, research and supervision tasks within the framework of the doctoral school (387/2012. Article 4 (2) of the Cr. ...

(4) The head of the doctoral topic is the lecturer or researcher with a scientific degree, whose topic announcement has been approved by the doctoral school's council, and who - based on this - responsibly manages and supports the studies and research work of the doctoral student working on the topic, as well as the preparation of the doctoral students for obtaining a scientific degree (Article 13 (5) of Cr. 387/2012).

(6) In justified cases, the doctoral topic or the person of the supervisor may be changed by the DIT at the request(s), at the request of the doctoral student concerned, or under its own authority.

Technical and Natural Sciences Doctoral and Habilitation Council (MTTDHT)

6/A. §

(3) The MTTDHT has the powers specified in points e), f), h), l) and m) of Section 6 (1) of these regulations in the powers delegated by the EDHT, with the exception of the definition of language requirements, the awarding of the doctoral degree, naturalization and revocation, as well as awarding and revocation of the habilitated doctoral title.

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The University Doctoral and Habilitation Council (EDHT)

6. §

(1) 387/2012. Kr. Based on § 9, paragraph (2) and § 22, the EDHT:

...

f) as defined in the doctoral regulations, on the proposal of the doctoral schools, appoints the members of the doctoral admissions committee, the members of the review committee and the official reviewers, establishes the complex examination committee, and also approves the persons of the doctoral supervisors and the instructors of the doctoral school, which authorizations can be delegated to the MTTDHT (87/2012 Cr. § 9 (2) para. f));

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(4) 387/2012. Pursuant to Article 10 (2) of the Doctoral School, the council of the doctoral school is entitled to decide



supervision, while retaining 50% of the original supervisor, Dr. Géza Gábor Gyarmati, who currently only works at the BDI as a supervisor.

According to the "Gábor Gyarmati (közgazdaságtan) (MTMT) List.pdf" file, there is no doubt about the suitability of Dr. Géza Gábor Gyarmati as a supervisor. We request the AIAMDI DIT administration to make him known among the AIMDI instructors as well.

Based on the "Mosavi Amir - ODT személyi adatlap.pdf", the suitability of Dr. Kosavi Amir cannot be doubted.

According to the "4-year-individual-research-and-study-program-FORM1.pdf" file, a detailed research plan was prepared for the program.

Budapest, 16 November 2024

Prof.Dr. József Tar  
Chair of the DIT

Prof.Dr. Gyula Simon  
vice-Chair of the DIT

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on the identity of the doctoral topic writers, supervisors and instructors of the doctoral school.

D5) The rules of core member and supervisor compliance

D5/B. Doctoral supervisor conditions

(7) Doctoral supervisors can be those for whom

a) has a scientific degree;

b) there are 5 articles published in the last 5 years in the ODT database and 5 more articles in the given discipline that meet the publication conditions explained in paragraphs (9)-(10) of Part D5/C;

c) undertakes to regularly update the list in point b) annually.

(8) The conditions of paragraph (7) b) and c) are checked regularly by the DI.