## CONSILIUL NAȚIONAL DE ATESTARE A TITLURILOR, DIPLOMELOR ȘI CERTIFICATELOR UNIVERSITARE

NATIONAL COUNCIL FOR ATTESTATION OF ACADEMIC TITLES, DIPLOMAS AND CERTIFICATES (CNATDCU)

## RAPORTUL COMISIEI DE ABILITARE REPORT OF THE HABILITATION COMMISSION

din data de (date) 07.02.2023

NUMELE și Prenumele candidatului (SURNAME and Forename of the candidate): Andreca VESCAN

Titlul tezei de abilitare / direcțiile principale de cercetare (Title of habilitation thesis / main research areas): Contribuțions to Topics in Software Engineering (Contribuții la probleme deschise de Inginerie Software)

Domeniul de studii universiture de doctorat (Field of doctoral studies): COMPUTER SCIENCE în care urmează să se confere calitatea de conducător de doctorat (future field of doctoral supervision)

Denumirea Instituției Organizatoare de Studii Universitare de Doctorat (IOSUD) / Instituției Organizatoare de Doctorat (IOD) unde are loc susținerea publică a tezei de abilitare (Name of the institution organizing doctoral studies (IOSUD), (IOD), where the public defense of the habilitation thesis takes place): Institute of Doctoral Studies, Babeș-Bolyai University (Doctoral School of Mathematics and Computer Science)

Punctele tari ale tezei de abilitare (Strong points of the habilitation thesis):

- 1. Recasting software engineering problems as optimizations or classification, such that techniques from soft computing and machine learning can be used in addressing them, such as, genetic algorithms, fuzzy-based approaches, ant colony optimization, neural networks, etc.
- 2. Research efforts not only directed on software engineering problems, but also to computer science education.
- 3. Integration of research and teaching, both in driving research from taught courses and incorporating research results in the classes.
- 4. Mixed methods used in research, including replication studies, empirical research, etc.

Punctele slabe ale tezei de abilitare (Weak points of the habilitation thesis): No weak point.

Rezultatul votului / observații / concluziile comisiei de abilitare se motivează în continuare (Voting result / observations / premises for the conclusions of the habilitation commission are as follows)

As a result of evaluating the candidate file and the public defense, the Habilitation Commission, unanimously, acknowledges the high level of research and professional performances of the candidate, accompanied by scientific contribution to the specific domain, and decides to award the Habilitation title in the domain of Computer Science to the candidate Assoc.Prof.PhD. Andreea Vescan.

## Recommendations:

- 1. While the breadth of the research program is impressive, it would be beneficial to add more indepth research into some of the application areas;
- 2. Publishing in more visible software engineering venues would also be beneficial;
- 3. More oriented to practical driven problem solving, in order to enhance the applicability of the results.

## COMISIA DE ABILITARE HABILITATION COMMISSION

NUMELE și Prenumele SURNAME and Forename

1. PROF. UNIV. DR. MARCUS ANDRIAN

2. PROF. UNIV. DR. PETCU DANA

3. PROF. UNIV. DR. LUCANU DOREL

Semnătura

Sigfature