



Universitatea
Transilvania
din Braşov

ADMITERE DOCTORAT 2020-2021

Sesiunea Septembrie 2020

**Şcoala Doctorală Interdisciplinară
(SDI)**

Domeniul de doctorat:

Ingineria Sistemelor

Conducător doctorat:

Constantin Suciu

TEME PENTRU CONCURS

TEMA 1: Utilizarea datelor generate sintetic pentru imbunatatirea performantei metodelor bazate pe inteligenta artificiala in diagnosticarea patologiilor cardiovasculare

Bibliografie recomandată:

1. Ian Goodfellow et al., Deep Learning, Adaptive Computation and Machine Learning series, MIT Press, 2016.
2. Francois Chollet, Deep Learning with Python, Manning, 2017.
3. Douglas P. Zipes et al., Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, Elsevier, 2019

TEMA 2: Solutii si procese decizionale clinice bazate pe inteligenta artificiala cu aplicatie in cardiopatia ischemica

Bibliografie recomandată:

1. Ian Goodfellow et al., Deep Learning, Adaptive Computation and Machine Learning series, MIT Press, 2016.
2. Francois Chollet, Deep Learning with Python, Manning, 2017.
3. Douglas P. Zipes et al., Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, Elsevier, 2019

Conducător doctorat:

Constantin Suciu



Transilvania
University
of Brasov

ADMISSION TO DOCTORAL STUDIES

2020-2021

Session September 2020

**Interdisciplinary Doctoral School
(SDI)**

Field of doctoral studies:

Systems Engineering

PhD supervisor:

Constantin Suciu

TOPICS FOR THE ADMISSION TO DOCTORAL STUDIES

TOPIC 1: Employing synthetically generated data for enhancing the performance of AI based methods in the diagnosis of cardiovascular pathologies

Recommended bibliography:

1. Ian Goodfellow et al., Deep Learning, Adaptive Computation and Machine Learning series, MIT Press, 2016.
2. Francois Chollet, Deep Learning with Python, Manning, 2017.
3. Douglas P. Zipes et al., Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, Elsevier, 2019

TOPIC 2: Artificial intelligence based clinical decision support solutions in coronary artery disease

Recommended bibliography:

1. Ian Goodfellow et al., Deep Learning, Adaptive Computation and Machine Learning series, MIT Press, 2016.
2. Francois Chollet, Deep Learning with Python, Manning, 2017.
3. Douglas P. Zipes et al., Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, Elsevier, 2019

PhD supervisor:

Constantin Suciu