



Cyber-
netics

1 (195)
2019

КІБЕРНЕТИКА ТА ОБЧИСЛЮВАЛЬНА ТЕХНІКА

ISSN 2663-2586 (Online)
ISSN 2663-2578 (Print)

and

**COMPUTER
ENGINEERING**

Editorial board

I.V. Sergienko - Editor-In-Chief (Glushkov Institute of Cybernetics, Kiev, Ukraine)

V.I. Gritsenko - Editor-In-Chief (International Research and Training Center for International Technologies and Systems Kiev, Ukraine)

L.M. Kozak - Deputy Editor (*IRTCITS*, Kiev, Ukraine)

Computer Science and Information Technologies:

Fainzilberg L.S. (*IRTCITS*, Kiev, Ukraine), Gorbunovs A. (*Riga Technical University*, Riga, Latvia), Gubarev V.F. (*Institute of Space Research*, Kiev, Ukraine), Hänßgen K. (*Leipzig Technical University*, Germany), Rachkovskij D.A. (*IRTCITS*, Kiev, Ukraine), Wunsch D.C. (*Missouri University of Science & Technology*, Rolla, USA)

Applied Mathematics:

Abraham A. (*Machine Intelligence Research Labs*, Washington USA), Anisimov A.V. (*T. Shevchenko National University*, Kiev, Ukraine), Chikrii A.A. (*Glushkov Institute of Cybernetics of the NASU*, Kiev, Ukraine), Gupal A.M. (*Glushkov Institute of Cybernetics*, Kiev, Ukraine), Kogut P.I. (*Dnipropetrovsk State University*, Dnipro, Ukraine), Mordukhovich Boris (*Wayne university*, Detroit, USA), Vlahavas I. (*Aristotle University of Thessaloniki*, Thessaloniki, Greece)

Technologies of medical diagnostics and treatment:

Azarhov O.Yu. (*Priazovsky State Technical University*, Mariupol, Ukraine), Belov V.M. (*IRTCITS*, Kiev, Ukraine), Ganushchak Yu. (*Maastricht University*, Medical Center, Maastricht, Netherlands), Kovalenko A.S. (*IRTCITS*, Kiev, Ukraine), Sicurello F. (*International Institute of TeleMedicine*, Milan, Italy), Zinkevich V. (*University of Portsmouth*, Portsmouth, UK)

Biology:

Antomonov M.Yu. (*Marzyeyev Institute of Public Health*, Kiev, Ukraine), Ermakova I.I. (*IRTCITS*, Kiev, Ukraine), Knigavko V.G. (*Kharkiv State Medical University*, Kharkiv, Ukraine), Kochina M.L. (*Petro Mohyla Black Sea National University*, Mykolaiv), Rybak I. (*Drexel University College of Medicine*, Philadelphia, USA), Salem A.-B. M. (*Ain Shams University*, Cairo, Egypt)

The journal is included in the List of Scientific Professional Editions of the Ministry of Education and Science of Ukraine (MESU) for PhD applicants in technical and physical-mathematical sciences (order of the MES of Ukraine № 1528, 29.10.2014), biological and medical sciences (order of the MES of Ukraine № 261, 06.03.2015)

The journal is included in Google Scholar, information resource Scientific Periodicals of Ukraine (V.I. Vernadsky NLU), ULRICHS WEB, Crossref (DOI), ROAD, Electronic Journals Library (Germany)

Certificate of State Registration KB № 12649-1533P, 14.05.2007

Editorial address:

**03187 Kiev, Acad. Glushkov av., 40
International Research and Training Center
for Information Technologies and Systems of the National Academy of Sciences of
Ukraine and the Ministry of Education and Science of Ukraine**

Phon: 503 95 62. E-mail: kvt.journal@kvt-journal.org.ua, <http://kvt-journal.org.ua/>

Editor *N.A. Charchiyan*

Computer layout *A.V. Tupalskiy*

Підп. до друку 27.03.2019. Формат 70×108/16. Гарн. Times New Roman.
Ум. друк. арк. 10,33. Обл. вид. арк. 9,84. Тираж 72. Зам. №

Віддруковано ВД “Академперіодика” НАН України
01004, Київ 4, вул. Терещенківська, 4.

Свідectво про внесення до Державного реєстру суб’єкта видавничої справи
Серії ДК № 544 від 27.07.2001 р.