

**EAI COMPUTER SCIENCE AND EDUCATION  
IN COMPUTER SCIENCE  
(CSECS)  
18th ANNUAL INTERNATIONAL CONFERENCE**

**June 24<sup>th</sup> – 27<sup>th</sup>, 2022**

**All times are in Eastern European Summer Time (EEST) (UTC+3), Bulgaria**

**Venue**

New Bulgarian University, Sofia, Bulgaria, room 110, building 2, Montevideo str.  
21, Sofia, Bulgaria, Find us: <https://nbu.bg/en/contacts>

Online participants

Metropolitan College, Boston University, Boston, USA

**Please, pay attention to the time difference between Bulgaria, Boston, USA, Germany,  
Portugal, India, and China**

**Eastern Daylight Time (EDT) (UTC-4), Boston, USA**

**Central European Summer Time (CEST) (UTC+2), Germany**

**India Standard Time (IST) (UTC+5.30), Gandhinagar, India**

**China Standard Time (CST), (UTC+8), Beijing, China**

**Western European Time (WET) (UTC+1), Covilhã, Portugal**

# Timetable

## 24 June 2022, Friday

### 2:00 pm – 2:40 pm, On-site registration

Welcoming Remarks

Prof. Ivan Landjev, New Bulgarian University, General Chair of CSECS 2022

Assoc. Prof. Dimitar Atanasov, Head of Department of Informatics, New Bulgarian University

Prof. Plamen Doynov, Rector of New Bulgarian University

European Alliance of Innovation, General Sponsor

Prof. Tanya Zlateva, Dean of Metropolitan College, Boston University

### Session Education in Computer Science I, 2:40 pm – 4:00 pm

**Chairs: Prof. Pinsky, Prof. Tuparov**

2:40 pm – 3:00 pm, Tanya Zlateva, Are Research Universities Meeting the Educational Challenge of the New Economy? Boston University

3:00 pm – 3:20 pm, Obionwu, Victor, Broneske, David, Saake, Gunter, A Collaborative Learning Environment using Blogs in a Learning Management System, German Centre for Higher Education Research and Science Studies, Hannover Germany, Otto von Guericke University, Magdeburg, Germany

3:20 pm – 3:40 pm, Kanabar, Vijay, Integrating Agile Development Approaches and Business Analysis Foundational Knowledge into a Project Management Course, Boston University

3:40 pm – 4:00 pm, Laskov, Lasko, Kostadinov, Tanyo, Nikolova, Ivon, Radev, Radoslav, Terziev, Angel, A Visual Tool to Study Sorting Algorithms and Their Complexity, New Bulgarian University

### Coffee Break, 4:00 pm – 4:20 pm

### Session Computer Science Implementations I, 4:20 - 6:00 pm

**Chairs: Prof. Zlatev, Assoc. Prof. Gorbounov**

4:20 pm – 4:40 pm, Khare, Manish, Mapara, Manan, Srivastava, Noopur, Gohel, Bakul, Region-based Multiple Object Tracking with LSTM Supported Trajectories, Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT, Gandhinagar, India

4:40 pm – 5:00 pm, Kostadinov, Georgi, Synopsis of Video Files Using Neural Networks: Component Analysis, New Bulgarian University

5:00 pm – 5:20 pm, Peteva, Maria, Methodological Creation of HDRI from 360-Degree Camera - Case Study, New Bulgarian university

5:20 pm – 5:40 pm, Olena Chebanyuk, An Approach to Software Assets Reusing, New Bulgarian University

5:40 pm – 6:00 pm, Landjev, Ivan, Rousseva, Assia, Rogachev, Emiliyan, On a Class of Minihypers in the Geometries  $PG(r,q)$ , New Bulgarian University, Sofia University

**Short Break, 6:00 pm – 6:20 pm**

6:20 pm – 6:40 pm, Traykov, Metodi, Mavrevski, Radoslav, Angelov, Slav, Trenchev, Ivan, Bioinformatics: Model Selection and Scientific Visualization, New Bulgarian University, South-West University "Neofit Rilski", Blagoevgrad, Bulgaria, University of Library Studies and Information Technologies, Sofia, Bulgaria

6:40 pm – 7:00 pm, Angelov, Slav, Integer Sequences in the HP Model of Dill, New Bulgarian University

7:00 pm – 7:20 pm, Tomov, Latchezar, Batselova, Hristiana, Veikova, Tsvetelina, Estimating COVID Case Fatality Rate in Bulgaria for 2020-2021, New Bulgarian University, Medical University of Plovdiv, Sofia University St. Kliment Ohridski

**8 pm, Official Dinner, Reataurant "The School", next to New Bulgarian University, <https://theschool.bg/kontakti/>, Montevideo Str, 38A**

## **25 June 2022, Saturday**

### **Session Education in Computer Science II, 2:00 pm – 4:00 pm**

**Chairs: Prof. Asenova, Prof. Zlateva**

2:00 pm – 2:20 pm, Vladimir Zlatev, ABA@BU Program Competitiveness and ABA Graduates Employability Support, Boston University

2:20 pm – 2:40 pm, Tuparov, Georgi, Database Schemas used in SQL University Courses – State of the Art, New Bulgarian University

2:40 pm – 3:00 pm, Braude, Eric, Plagiarism Abatement with Assignment Templates, Boston University

3:00 pm – 3:20 pm, Page, Greg, Tay, Huey Fern, Reflections on the Applied Business Analytics Student Writing Project, Boston University

3:20 pm – 3:40 pm, Burstein, Leo, Abrahamson, Andrew, Pike, Courtney, Digital Learning Technologies - Supporting Innovation and Scalability, Boston University

3:40 pm – 4:00 pm, Yu, Hanbo, Improving Student Employability with Python and SQL, Boston University

### **Coffee Break, 4:00 pm – 4:20 pm**

### **Session Computer Science Implementations II, 4:20 - 6:00 pm**

**Chairs: Prof. Chitkushev, Assoc. Prof. Laskov**

4:20 pm – 4:40 pm, Gorbounov, Yassen, Chen, Hao, Context-Switching Neural Network for Constrained-Space Hardware, New Bulgarian University and China University of Mining and Technology

4:40 pm – 5:00 pm, Khan, Ruksana, Schena, Patrick, Park, Kathleen, Pinsky, Eugene, A Clustering Approach to Analyzing NHL Goaltenders' Performance, Metropolitan College, Boston University

5:00 pm – 5:20 pm, Vodenska, Irena, Trajanov, Risto, Chitkushev, Lou, Trajanov, Dimitar, Challenges and Opportunities in ESG Investments, Boston University, Rice University, North Macedonia

5:20 pm – 5:40 pm, Ji, Linpeiyu, Li, Zhaoyu, Lucas, Mary, Vodenska, Irena, Chitkushev, Lou, ZHANG, Guanglan, Pregnancy Outcomes in Women with Pregestational Diabetes, Boston University, Johns Hopkins University, Drexel University

5:40 pm – 6:00 pm, Asghari, Maryam, Alizadeh-Shabdiz, Farshid, Image Decluttering Techniques and its Impact on YOLOv4 Performance, Boston University

6:00 pm – 6:20 pm, Goleva, Rossitza, Sokullu, Radosveta, Kadrev, Vassil, Savov, Alexander, Mihaylov, Svetoslav, Garcia, Nuno, Real-Time and Near-Real-Time Services in Distributed Environment for IoT - Edge - Cloud Computing Implementation in Agriculture and Well-Being, New Bulgarian University, Ege University, Izmir, Turkey, Comicon Ltd., Bulgaria, University of Beira Interior, Portugal

**6:20 pm, Closing Remarks**

**Prof. Zlateva, Prof. Landjev**

**26 June 2022, Sightseeing**

**27 June 2022, 11 am – 14 am, Meeting of the CSECS 2022 Organizers and Students, Room 315, Building 1, New Bulgarian University**