5th EAI COMPUTER SCIENCE AND EDUCATION IN COMPUTER SCIENCE 2026 (EAI CSECS 2026)

Final Program

Nov 3-4, 2026

All times are in EST — Eastern Standard Time, EST-5 hours, Boston, USA

Venue: Boston University Metropolitan College, Boston, MA 02215, USA

1010 Commonwealth Avenue, Room 101

Link for online participants:

https://bu-metcollege.zoom.us/j/94100627528?pwd=KJzlTZJo1pxlSOwiAXT1i7izYyTN1C.1

Please, pay attention to the time difference between Bulgaria, Spain, Boston, USA, Ukraine, Sri Lanka, India, Japan, Malaysia, and China

Timetable

3 Nov 2026, Tuesday

8:45 AM – 9:00 AM, Registration; Coffee & Tea

9:00 AM - 10:05 AM Opening Ceremony - Welcome Remarks & Keynote

Welcoming Remarks from Prof. Tanya Zlateva, Dean of the Metropolitan College, Boston University, Prof. Chitkushev, Prof. Kanabar, Prof. Eugene Pinsky, Metropolitan College, Boston University

Radka Vasileiadis, Veronika Kissova, European Alliance of Innovation, General Sponsor

Prof. Ivan Landjev, New Bulgarian University, General Chair of CSECS 2025 and Prof. Dimitar Atanasov, Head of the Department of Informatics at New Bulgarian University

Keynote speech

Steve G. Akers (MET'94), CSECS Symposium: "What a great time to be alive"

10:05 AM - 10:15 AM Coffee Break

Part I. Education in Computer Science

Chairs: Prof. Chitkushev, Prof. Atanasov

Session AI in Education in Computer Science

10:15 AM - 10:30 AM

1. Exploring Students Employment. Expectations, AI Concerns and the Role of Universities, Antonova, Albena, Georgiev, Dilyan, Faculty of Mathematics and Informatics, Sofia University St. Kl. Ohridski, Gourova, Elissaveta, New Bulgarian University, Bulgaria, online

10:30 AM - 10:45 AM

2. Orchestrated Agent Architecture for AI-Assisted Discussion Evaluation, Pike, Courtney, Burstein, Leo, Zlateva, Tanya, Boston University, USA, in person

10:45 AM - 11:00 AM

3. Orchestrating Semester Readiness within a Large LMS Ecosystem A Process-Driven Operational Platform for a Small Academic Technology Team, Abrahamson, Andrew, Burstein, Leo, Boston University, USA, in person

11:00 AM - 11:15 AM

4. Digitalisation of educational centre: The case study. Elissaveta Gourova (Sofia University) (New Bulgarian University), online

Session Data analytics in Education in Computer Science

Chairs: Prof. Tanya Zlateva, Assoc. Prof. Elissaveta Gourova

11:15 AM - 11:30 AM

1. Centralized Classroom Data Repository for Learning Analytics in Software Engineering Education, Alex Elentukh, Reed, Rebecca, Han, Chen, Sivadassan, Sarath, Truong, Kevin, Zhang, Xiaoyue, Boston University, USA, in person

11:30 AM - 11:45 AM

2. When Incorrect Feedback Goes Undetected: Evidence from Taxonomy-Based Learning in Software Engineering, Alex Elentukh, Naidoo, Tyron, Boston University, USA, in person

11:45 AM - 12:00 PM

3. Development and Application of the EduFlow BI Platform in the Context of Contemporary Practices of Educational Analytics, Rovenska, Viktoriia, Sahaida, Pavlo, Technical University Metinvest Polytechnica LLC, Ukraine, Rekova, Nataliia, Sofia University "St. Kliment Ohridski", Bulgaria, online

12:00 PM - 12:15 PM

4. Subjective Preference Judgments in a Hands-On Machine Learning Activity: An Exploratory Study of Packaging Design Evaluations among University Students Hiroko Kanoh (Yamagata University), in person

12:15 PM - 1:00 PM Lunch

Session Quality of Learning Process in Education in Computer Science

Chairs: Prof. Tuparov and Prof. Zlatev

1:00 PM - 1:15 PM

1. The Efficiency Paradox in Education: Algorithmic Bypass and the Erosion of Learning, Vijay Kanabar, Boston University, USA, in person

1:15 PM - 1:30 PM

2. Career Compass - A Multi-Agent Systems for Skill-Aware Career Advising, Sree Kumar Valath Bhuan Das, Padalkar, Nakul, Zlatev, Vladimir, Zlateva, Tanya, Boston University, in person

1:30 PM - 1:45 PM

3. TerrierTA: An Open, Multi-Agent Framework for Course-Grounded Assessment, Tutoring, and Content Generation, Kaur, Rashanjot, Boston University; Sharma, Bhanu, Northeastern University; Lam, Hong, Boston University; Park, Kathleen, Boston University, in person

1:45 PM - 2:00 PM

4. Comparative Analysis of Students Performance and Discussion. Participation in Online Learning Environment, Kundu, Triparna (Metropolitan College, Boston University); Pinsky, Eugene (Metropolitan College, Boston University), in person

2:00 PM - 2:15 PM

5. A phased launch of the Pharmaceutical Commercial Data Certificate, Scott Hull, Faculty, Boston University Metropolitan College, in person

Part II. Computer Science Theory and Implementations

Chairs: Prof. Pinsky, Prof. Traikov

Session Optimization Solutions in Computer Science Theory

2:15 PM - 2:30 PM

1. Representative Subsample as a LP Problem, Dimitar Atanasov, New Bulgarian University, Bulgaria, online

2:30 PM - 2:45 PM

2. Ontology Design Approach Based on Model-Driven Architecture Principles, Chebanyuk, Olena,Artificial Intelligence Research Institute, Spanish National Research Council (IIIA-CSIC)), Gizun, Andrii, Taras Shevchenko National University of Kyiv, Ukraine, online

2:45 PM - 3:00 PM

3. Evolution of a Software Engineering Project Course: From Traditional Development to AI-Integrated Practice, Zhang, Yuting (Boston University), in person

3:00 PM - 3:15 PM

4. A study of the software engineering process's complexity and its relationship with software quality, Dinev, Dobromir (NBU), online

3:15 PM - 3:30 PM

5. Autonomous UWB Infrastructure Mapping via Accumulative Ring Intersection, Stoev, Petko (Institute of Information and Communication Technologies Bulgarian Academy of Sciences); Krastev, Stoyko (Institute of Information and Communication Technologies Bulgarian Academy of Sciences); Ivanov, Vladimir (Institute of Information and Communication Technologies Bulgarian Academy of Sciences), online

3:30 PM - 3:45 PM

6. Cognitive Value Assessment of UML Sequence Diagrams: A Miller-Based Model with AI-Driven Experimental Validation, Chebanyuk, Olena, Sierra, Carles, Artificial Intelligence Research Institute of Spanish National Research Council, Spain, online

Session ML Implementation in Financial Sector

Chairs: Prof. Vodenska and Assoc. Prof. Kostadinova

3:45 PM - 4:00 PM

1. Data Leakage in Financial Machine Learning: A Taxonomy, Empirical Quantification, and Remediation Framework Using Cryptocurrency Markets, Pattnaik, Sarthak, Metropolitan College, Boston University), Jain, Chhayank, Arizona State University, Pinsky, Eugene, Metropolitan College, Boston University, USA, in person

4:00 PM - 4:15 PM

2. Adaptive Computational Scaling in Sparse Mixture-of-Experts via Entropy-Gated Thinking Budgets, Divyesh Jagetia, Boston University, USA, in person

4:15 PM - 4:30 PM

3. AI and Machine Learning in Financial Fraud Detection: Defending Financial Systems in the Age of Adversarial AI, Vodenska, Irena, Chitkushev, Lou, Choi, Kyung-Shick, Boston University, USA, in person

5 PM - Dinner at Gopchang Story - 973 Commonwealth Avenue Boston, MA 02215

4 Nov 2026, Wednesday

Session Security and Ethics in AI Implementations

Chairs: Prof. Alizadeh-Shabdiz, Farshid and Assoc. Prof. Rossitza Goleva

9:00 AM - 9:15 AM

1. WikiFlow: Predicting Wikipedia Editor Dropout at Scale Using Distributed Machine Learning on Google Cloud, Meena, Aryan, Patel, Kunj Manish Kumar, Alizadeh-Shabdiz, Farshid, Boston University, in person

9:15 AM - 9:30 AM

2. Is Artificial Intelligence (AI) Technology Anti-Human? Ethics of the Relationship Between Machines and Humans, David Avishay (JCE - Azrieli College of Engineering – Jerusalem, Israel), online

9:30 AM - 9:45 AM

3. Intelligent System for Early Risk Assessment, Andreeva, Asya, Andreeva, Simona, Traykov, Metodi, Kostadinova, Hristina, New Bulgarian University, Bulgaria, in person

Session Optimization of the Algorithms in Edge-to-Fog-to-Cloud Continuum

Chairs: Prof. Kanabar and Assoc. Prof. Traikov

9:45 AM - 10:00 AM

1. Minimum Spanning Tree Algorithms on Large Scale Random Networks, Giraldo Leiva, Nicolay Alfredo, New Bulgarian University, Bulgaria, online

10:00 AM - 10:15 AM

2. Unsupervised Vibration Fault Detection Using Cepstrum-Based Feature Extraction and Mahalanobis Analysis, Kolev, Atanas, Gorbounov, Yassen, New Bulgarian University, Bulgaria, Chen, Hao, China University of Mining and Technology, China, online

10:15 AM - 10:30 AM

3. Data-Driven Predictive Maintenance via Adaptive Hilbert-Huang Feature Extraction and XGBoost Classification, Kolev, Atanas, Gorbounov, Yassen, New Bulgarian University, Bulgaria, Chen, Hao, China University of Mining and Technology, China, online

10:30 AM - 10:45 AM

4. Performance Analyses and Resource Usage Optimization of the Linux Dispatcher, Krustev, Alexander, Goleva, Rossitza, New Bulgarian University, Bulgaria, in person

10:45 AM - 11:00 AM

5. Audio Augmented Reality for Celestial Objects through Music-theoretic and Spatial Sonification, Hanna Suzuki, Bedford High School, online

11:00 AM - 11:15 AM Coffee break

Session Computing Systems and AI Implementation in Well Being and Medicine

Chairs: Prof. Chikutchev and Prof. Gorbounov

11:15 AM - 11:30 AM

1. CareVault: Design and Implementation of a Secure Information Management Prototype for Family Caregiving, Elentukh, Alex, Kerrigan, Caroline, Xu, Tianpeng, Laszlo, Michael, Sukhdeve, Pooja, Huang, Rongna, Boston University, USA, in person

11:30 AM - 11:45 AM

2. Sublexical Emotional Valence Recognition: A Biphone-Based Experimental Framework, Slavova, Velina, Dimitrov, Ventsislav, Uzunova, Zhuliyana, Kostadinov, Nikola, Serafimov, Boyan, Stoyanov, Ivaylo, Kodzhabashev, Mihail, New Bulgarian university, Bulgaria, online

11:45 AM - 12:00 PM

3. Evaluating Predictive Models for Drug-Drug Interaction, Andreeva, Simona, Andreeva, Asya, Kostadinova, Hristina, Traykov, Metodi, New Bulgarian University, Bulgaria, in person

12:00 PM - 12:15 PM

4. Genetic Testing Utilization Among Ovarian Cancer Patients, Li, Jiarong (Boston University); Pronley, Edward (Boston University); ZHANG, Guanglan (Boston University); Chitkushev, Lou (Boston University), in person

12:15 PM - 12:30 PM

5. Machine Learning for Asthma Prediction in Pediatric Outpatient Patients: Internal Validation, Calibration, and SHAP Interpretation, Tomov, Latchezar (New Bulgarian University); Mihaylova, Diana (New Bulgarian University); Lazova, Snezhina (Medical University -Sofia), online

12:30 PM - 12:45 PM

6. MA-CD-KT: Calibration-Centric Multi-Agent Knowledge Tracing with LLM-Guided Semantic Arbitration and Cognitive Diagnosis, Guo, Meixia (Lingnan University); Zhang, Xupeng (Beijing Language and Culture University); Dong, Chengzu (Lingnan University); Yu, Lisha (Lingnan University), online

12:45 PM - 1:00 PM

7. Assessment of Foundation Vision-Language Models on Dental Radiograph Interpretation, Atchibay, Saya (Boston University); Alchaar, Aiya (Boston University); Alizadeh-Shabdiz, Farshid (Boston University); Liao, Peixi (Boston University), in person

1:00 PM - 1:15 PM

Closing remarks from Prof. Zlateva & Best Paper Award