



Workshop of Gaming, Learning and Teaching (WGLT)

Technical University of Varna

8 – 9 November 2019

E-mail: vim@ieee.org

<https://www.sensornetworkslab.com/events/wgl-t-workshop/>

Scientific coordinator: Valentina Markova, PhD

The “Workshop of Gaming, Learning and Teaching” (WGLT) was organized by IEEE CAS/SSC Bulgarian Chapter, IEEE TU Varna Student branch and hosted by Telecommunications Department, Technical University of Varna. The event has been supported by the IEEE Circuits and Systems Society in the framework of the 2019 IEEE CASS Outreach Initiative.

The WGLT aimed to raise students' awareness and interest in engineering education by captivating, interactive and intuitive approaches. The event was held on 08-09 November 2019 at the Technical University of Varna.

Description of activities

The Outreach Event offered specific opportunities for young professionals: (i) to meet prominent scientists working in the CAS area; (ii) – to implement practical training session and lectures focused on human-machine interaction, programming and development of the video games; (iii) to facilitate the chances for their engagement with IEEE CASS activities

In brief, the Workshop Agenda was comprised of plenary sessions, students' lectures and training activities.

Plenary talks were given by:

- Dr. Otilia Kocsis (University of Patras, GREECE)
- Prof. Ivan Ganchev, University of Limerick, Ireland

Students' talks were given by:

- Simeon Svetlinov – Specialty “Information and Communication technologies”
- Osman Arif – Specialty “Computer Science”

The Plenary sections were attended by 60 participants.

The two training activities, involving 30 students, were carried out with the support of TU Varna IEEE Student branch. The focus was on:

- *Development of game with artificial intelligence*

During the training, participants were acquainted with the basic principles of the artificial intelligence and learn how to use artificial intelligence (AI) in order to generate responsive and intelligent behaviors primarily in non-player characters similar to human-like intelligence.

- *Environmental monitoring system*

During this activity attendees learned about different sensors types, data acquisition systems and the functionality offered by smart technologies for the monitoring and analysis of data.

After the training sessions a Discussion took place – summarizing the main accents of training, and offering some conclusion of the results. Trainees were given the opportunity to ask questions, express opinions, and suggest recommendations. Information and advertising materials were spread among all participants.

Quantitative metrics

Metrics	Results
Number of participants informed about IEEE CASS activities	60
Number of participants involved in the training activities	30
Number of demo projects	4
Number of the questions, suggestions, and comments (during the presentation and Discussion)	30

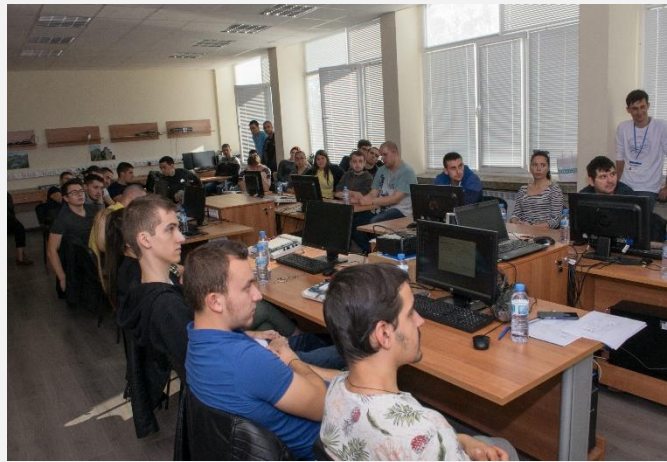
WGLT agenda

Friday 08.11.2019	
9:30 – 10:00	Registration for the First day
10:30 – 12:30	Plenary session
	<ul style="list-style-type: none">• Dr. Otilia Kocsis, “AI and Active ageing”• Prof. Ivan Ganchev “Creating Smart Habitat for Elderly through Indoor Living Space Improvement: The SHELD-ON Approach”
12:30 – 14:00	Lunch break
14:00 – 15:00	Students’ talk
	<ul style="list-style-type: none">• Osman Arif, “Game theory”
15:00 – 15:15	Coffee break
15:15 – 17:00	Training activity 1: Games with AI
Saturday 09.11.2019	
9:30 – 10:00	Registration for the Second day
10:00 – 10:30	Students’ talk
	<ul style="list-style-type: none">• Simeon Svetlinov, “How blockchain will change the gaming”
10:30 – 13:00	Training activity 2: Environmental monitoring system
13:00 – 14:00	Lunch break
14:00 – 14:15	Discussion

Photo Gallery



Plenary session



Students' talk





Training activities



Award ceremony

Financial report

The support by the IEEE CASS (\$2,600 USD) was used (i) for payment of travel expenses of two speakers; (ii) for catering services; (iii) for promotional materials (iv) for providing the winners of the contest (part of the training activities) with awards and (v) for accessories and consumables necessary for the training activities.

The Technical University of Varna provided all necessary rooms and laboratories for the trainings), free Wi-Fi access to internet and volunteers in support of the organization and implementation of the Outreach Event.