

DAY 1 (25.11)	morning 9:00 – 12:00	CAD Platform Spatix – English	
	afternoon 14:00 – 17:00	Extra Attributes for Points - English	DTM izvoz iz TerraScan-a i TerraModeler-a - Serbian
DAY 2 (26.11)	morning 9:00 – 10:30 – 12:00	Terrasolid Introduction and New End Products - English	
	afternoon 13:00 – 16:00	Machine Learning Classification - English	Detekcija promena - Serbian
DAY 3 (27.11)	morning 9:00 – 12:00	New Matching Capabilities - English	3D modeli zgrada - Serbian
	afternoon 13:00 – 16:00	Tripod Scanner Processing – English	Železnice i Žice - Serbian
DAY 4 (28.11)	morning 9:00 – 12:00	iTwin Capture Modeler, Bentley systems - English	Matching Multiple Drone Sessions - English
	afternoon 13:00 – 16:00	Industry Partner Presentations - English	

DAY 1

morning
9:00 – 12:00

CAD Platform Spatix – English

- General overview of Spatix CAD Platform
- Installation and licensing
- Spatix workspace (toolbars and views), customization
- Tools overview
- Application settings / File settings
- Working with different data sources
- Using spaccels

afternoon
13:00 – 16:00

Extra Attributes for Points – English

Use of extra attributes in point cloud processing.
Extra attributes can be provided by the sensor or be user defined.
Extra attributes make it possible to have multiple alternative classification results or to have multiple distance values stored in the point cloud.

DTM izvoz iz TerraScan-a i TerraModeler-a – Serbian

Kreiranje i izvoz digitalnog modela terena pomoću TerraScan-a i TerraModeler-a, i njihovo upoređivanje.
Izrada konturnih linija terena.
Protok drenažne vode na površinskom modelu.

DAY 2

Terrasolid Introduction and New End Products – English

Guest Talks

Hybrid Mapping Solutions: LiDAR Meets Hydrography - **Momir Mitrović**, Director of the spatial data collection sector and co-owner of MapSoft

morning
9:00 – 10:30 –
12:00

Machine Learning Classification – English

Machine learning based classification of above ground features.

Detekcija promena – Serbian

Detekcija promena između dva oblaka tačaka upoređivanjem novijeg aktivnog oblaka tačaka sa starijim referentnim oblakom tačaka korišćenjem dodatnih atributa. Vizuelizacija atributa „promene“ na osnovu razlika radi isticanja područja gde su objekti izgrađeni ili uklonjeni (zgrade, drveće itd.).

afternoon
13:00 – 16:00

Machine Learning Classification – English

Machine learning based classification of above ground features.

Obrada LiDAR podataka prikupljenih dronom – Serbian

Rad sa TerraScan Wizard-om za obradu podataka prikupljenim DJI dronom, filtriranje tačaka i otklanjanje šuma, klasifikacija tačaka, uključujući izradu DTM-a.

DAY 3

morning
9:00 – 12:00

New Matching Capabilities – English

Matching mobile data to reference data or internally using new cloud-to-cloud observations.

3D modeli zgrada – Serbian

Pregled modeliranja grada korišćenjem ALS LiDAR podataka i slika. Primeri i tok rada za efikasno kreiranje vektora zgrada i njihovo teksturiranje.

afternoon
13:00 – 16:00

Tripod Scanner Processing – English

Initial processing steps for many scans collected with a terrestrial scanner.
Steps include classifying out window reflections which produce shadow images of objects in wrong locations.

Železnice i Žice - Serbian

Korišćenje UAV LiDAR podataka za prikazivanje vektorizacije nadzemnih žica, vektorizacije železničkih šina, bočnih ivica kosina - linija loma balasta duž železničke pruge, prikazivanje drveća koje bi moglo pasti na pruge i prikaz vegetacije koja raste preblizu pruge.

DAY 4	morning 9:00 – 12:00	<p>Matching Multiple Drone Sessions – English</p> <p>Steps for matching multiple drone lidar sessions. Matching is first done for each flight session on each own. Second phase imports all the data into one project and solves corrections for any mismatches between flight sessions.</p>	<p>iTwin Capture Modeler, Bentley systems – English</p> <p>The sessions provide a foundational understanding of reality data and explores both the challenges and advantages of working with it. Participants will gain insights into Bentley’s solutions and capabilities in the realm of digital delivery.</p>
	afternoon 13:00 – 16:00	<p>Industry Partner Presentations – English</p> <p>Guest Talks</p> <p>CAD platform Spatix - Denis Antoshkin, Spatix</p> <p>The CircBoost Project: Generation of LoD3 Building Models from LiDAR Point Clouds - Nenad Brodic, Assistant Professor at Faculty of Civil Engineering, Department of Geodesy and Geoinformatics, University of Belgrade</p> <p>Enhancing Digital Delivery with Bentley Infrastructure Solutions- Mihaela Dragoi, Bentley Systems</p> <p>Reconstructing the Past, Shaping the Future: Archaeology in the LiDAR Age - Nenad Joncic, National Museum of Serbia</p> <p>The use of LiDAR in the project Creating flood risk maps (EU - IPA FLOODS project) - Dr. Dejan Đorđević, VGI - Military Geographical Institute, Serbia</p>	