



# Summer school on exploring the landscape with dynamic visualization,

tangible interaction, and UAV-lidar

The Summer school will be held at <u>Pavol Jozef Šafárik University in Košice</u> (UPJS) in the period of 15-18 July 2019. The event is organized by the <u>Institute of Geography</u>, <u>Faculty of Science</u>.

## Web link

## LOCATION

Jesenná 5, Košice

48°43'44.7"N 21°14'54.3"E

#### 48.729093, 21.248414



## PARKING

There is a paid parking around the University building, we recommend to use the Letná, Zimná, or Strojnícka street. Free parking is available near Technical University, 48°44'01.4"N 21°14'37.2"E, which is 10 minutes walk from the venue of the Summer School.





**LECTURES & SCHEDULE** 

15 July 2019

UPJS Building, Jesenná 5,

## First floor, Videoconferencing room SJ 1S24 (2.17T)

8:30 - 9:00 Registration

9:00 - 9:15 Official welcome

9:15-9:45 Jaroslav Hofierka (UPJS): Geospatial modelling in high resolution: acivities and results of the UPJS team.

9:50-10:30 Helena Mitášová (North Carolina State University, USA): Exploring changing landscapes with dynamic visualizations and tangible interaction in GRASS GIS and with Tangible landscape.. (Lecture 1).

10:30 - 10:50 *Coffee break* 

10:50 - 12:00 Helena Mitášová (North Carolina State University, USA): TGRASS for multitemporal surfaces. Tangible landscape technology. (Lecture 2).

12:00 - 13:00 Lunch break

#### UPJS Building, Park Angelinum 9 (Entrance via Jesenná 5)

#### First floor, Computer room SA1C03

13:00 - 14:30 Helena Mitášová (North Carolina State University, USA): Geospatial analysis and visualization of high resolution, multitemporal surfaces. (Practical exercise).

#### 14:30 - 14:50 *Coffee break*

14:50 - 16:30 Helena Mitášová (North Carolina State University, USA): Tangible landscape: evaluation and development of educational activities. (Practical exercise).

#### 16 July 2019

UPJS Building, Jesenná 5,

#### First floor, Videoconferencing room SJ 1S24 (2.17T)

8:30 - 9:30 Michal Gallay (UPJS): The unpiloted helicopter system for remote sensing Scout B1-100: background and experience, intorudicnt the demonstration flight (Lecture on the background)

9:30 - 10:15 Bus transport to the field airport Mirkovce (20 min drive north from Košice)

10:15 - 12:00 Ján Kaňuk, Eduard Dvorný, Michal Gallay (UPJS): Demonstrating the lidar-data collection and processing with the UAV helicopter Scout B1-100 in the field (**field airport near Mirkovce**)





12:00 - 12:30 Bus transport back to Košice (UPJŠ)

12:30 - 13:30 Lunch break

# UPJS Building, Park Angelinum 9 (Entrance via Jesenná 5)

### First floor, Computer room SA1C03

13:30 - 14:40 Ján Kaňuk, Michal Gallay (UPJS): IMU/GPS flight line data processing (Practical exercise)

14:40 - 15:00 *Coffee break* 

15:00 - 16:30 Ján Kaňuk: UAV-VUX1 Lidar-data processing in RiProcess (Demonstration of a case study)

17 July 2019

#### UPJS Building, Park Angelinum 9 (Entrance via Jesenná 5)

#### First floor, Computer room SA1C03

8:30 - 10:00 Martin Isenburg (rapidlasso GmbH): Processing UAV-lidar, UAV-SfM, ALS data in LAStools (Hands-on training).

10:00 - 10:30 *Coffee break* 

10:30 - 12:00 Martin Isenburg (rapidlasso GmbH): Processing UAV-lidar, UAV-SfM, ALS data in LAStools (Hands-on training).

12:00 - 13:00 Lunch break

13:00 - 14:30 Martin Isenburg (rapidlasso GmbH): Processing UAV-lidar, UAV-SfM, ALS data in LAStools (Hands-on training).

14:30 - 14:50 *Coffee break* 

14:50 - 16:30 Martin Isenburg (rapidlasso GmbH): Processing UAV-lidar, UAV-SfM, ALS data in LAStools (Hands-on training).

#### 18 July 2019

#### Departure from Košice 8:30, latest arrival to Košice 16:00

Exploring the taste of the Tokaj wine region (Field trip) – look out tower in Veľká Tŕňa, visiting the vineyard from which the lidar sample data come from, including lunch + tasting of 6 local wine sorts (**price 25-35 EUR**)