



Date: 15-04-2021 Venue: Western Serbia Academy of Applied Sciences,
Trg Sv. Save 34, Uzice, Serbia (online)

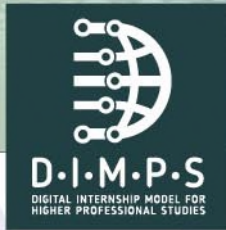
Kick-off meeting

The City of Ruse, the University of Ruse "Angel Kanchev" and our Project Team

Plamen Zahariev, Georgi Hristov, Nina Bencheva, Ivan Beloev, Diyana Kinaneva and Georgi Georgiev
University of Ruse "Angel Kanchev", Ruse 7004, Bulgaria



The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

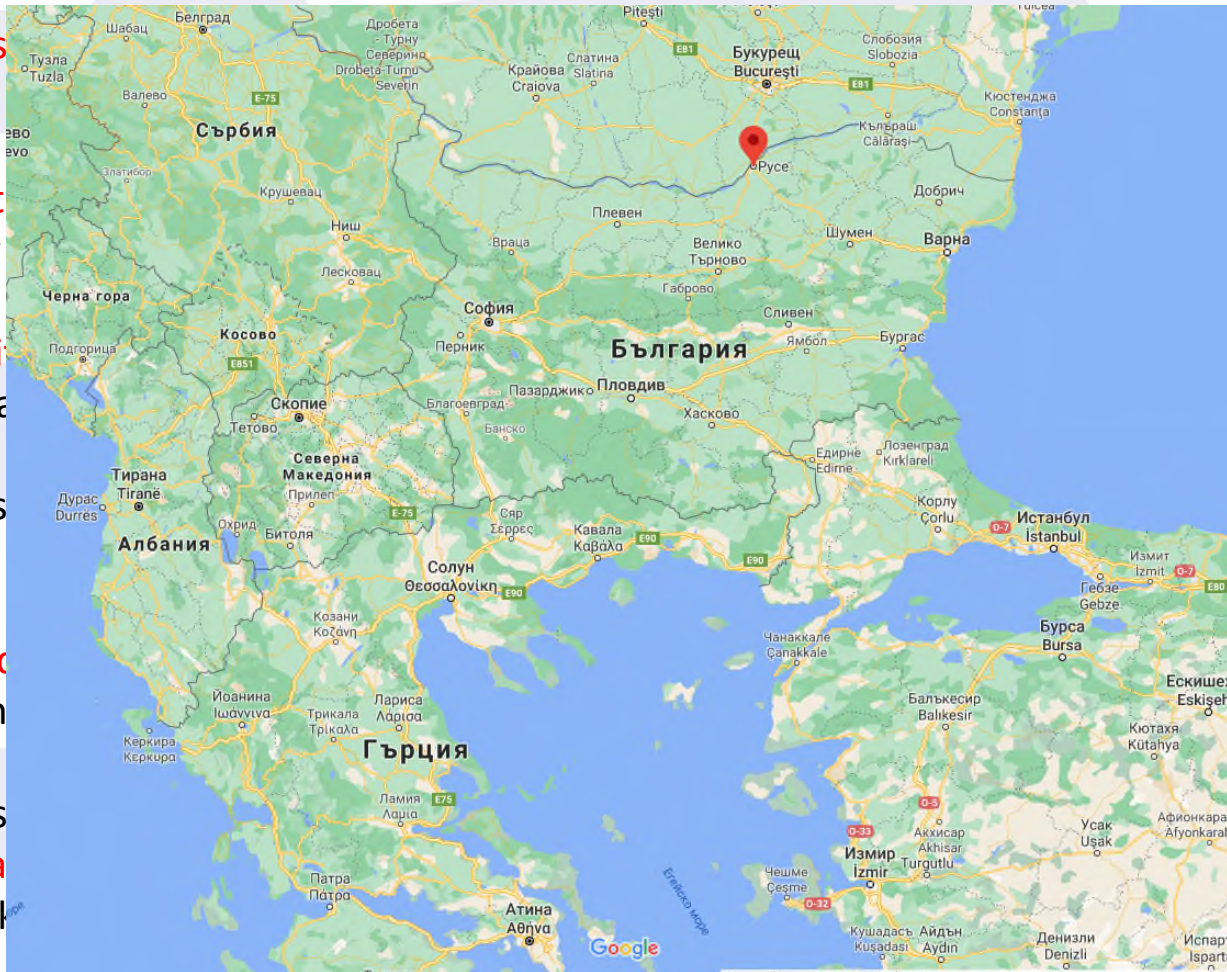


THE CITY OF RUSE

Ruse is a city in Bulgarian - Bulgaria. Ruse is located on the right bank of the Danube river, approximately 150 km from the Bulgarian capital Sofia, serving as a major port, serving as a gateway to the country.

Ruse is a city with Baroque and Ottoman architecture, attracting tourists. It is known for the Friendship Bridge between Bulgarian-Romania and the Ruse Shipyard.

Ruse is a city with a rich literary heritage. Elia Blagovestova Arlen (born Dilka Arlen) is a famous Bulgarian writer and poet who lived in Ruse.





THE CITY OF RUSE

Ruse is famous for the many **first innovations in Bulgaria**, including:

- 1864 – the **first printing office** in Bulgaria
- 1867 – the **first railway line** linking Ruse and Varna, was launched into operation
- 1879 – the **first agronomical school "Obraztsov chiflik"**, today – Agricultural scientific research institute.
- 1881 – the **first steel ship in Bulgaria** was built
- 1881 – the **first privately owned Bulgarian bank – "Girdap"**
- 1881 – the **Machine School for the Navy, the first technical school in Bulgaria**. Later it was moved to Varna.
- 1883 – the **first Weather station**
- 1884 – the **first Bulgarian pharmacy association**
- 1885 – the **first Bulgarian technical association** was instituted
- 1890 – the **first Chamber of Commerce and Industry**
- 1891 – the **first private insurance company "Bulgaria"**
- 1896 – the **first manually operated elevator**
- 1897 – the **first movie projection**.
- Ruse had the **first Bulgarian factories for soda water, lemonade and for neckties**.
- The **first Bulgarian aviator Simeon Petrov** was born in Ruse.





 UNIVERSITY OF RUSE
"ANGEL KANCHEV"

Co-funded by the
Erasmus+ Programme
of the European Union



THE CITY OF RUSE





THE UNIVERSITY OF RUSE "ANGEL KANCHEV"



**University of Ruse
"Angel Kanchev"**

The University of Ruse "Angel Kanchev" is an autonomous state higher school. It was transformed with a Decision of the People's Assembly of 21 June 1995 and is a successor of the higher technical school, established in Ruse on the 12 November 1945. There are eight faculties in the structure of the University: Agrarian and Industrial Faculty, Faculty of Mechanical and Manufacturing Engineering, Faculty of Electrical Engineering Electronics and Automation, Faculty of Transport, Faculty of Business and Management, Faculty of Natural Sciences and Education, Faculty of Law, Faculty of Public Health and Healthcare.

The University has three Branches - in Silistra, Razgrad and Vidin and is founder of the Bulgarian-Romanian Inter-university Europa Centre.





THE UNIVERSITY OF RUSE "ANGEL KANCHEV"

Around 10 000 students and doctoral degree students study in state-of-the-art study halls and research laboratories, spread on 67 490 sq m (of which over 13 000 sq m in Building 2, officially opened in 2010). The teaching staff consists of 499 highly qualified full-time lecturers, of whom 49 professors, 177 associate professors and 296 PhD lecturers.



[Virtual album for the 75th Anniversary of the University](#)



OUR TEAM



Assoc. Prof. Georgi Hristov, PhD



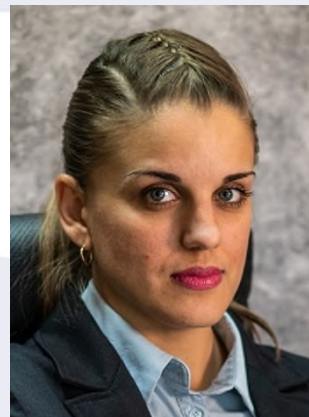
Assoc. Prof. Plamen Zahariev, PhD



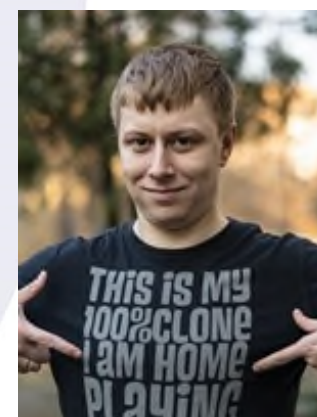
Assoc. Prof. Nina Bencheva, PhD



Assoc. Prof. Ivan Beloev, PhD



Senior Assist. Prof. Diyana Kinaneva, PhD



Eng. Georgi Georgiev, MSc

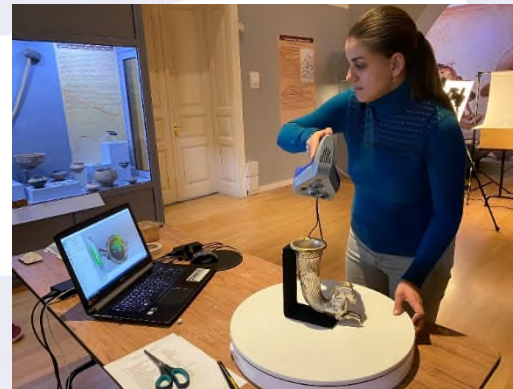
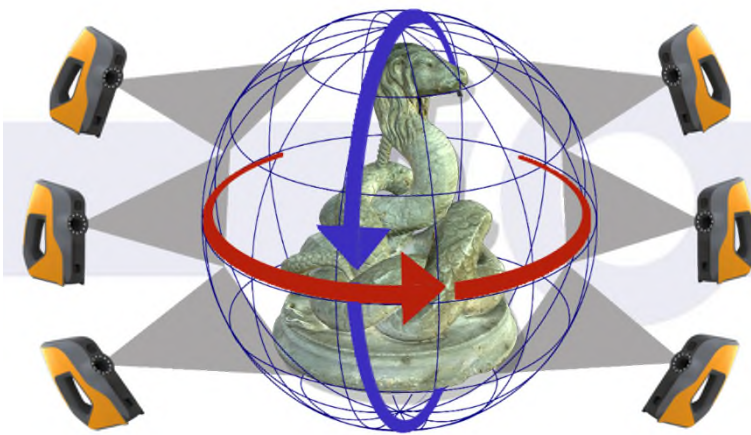
SOME OF OUR PAST AND PRESENT PROJECTS

1. 2012-2015 „Strategic Alignment of Electrical and Information Engineering in European Higher Education Institutions (SALEIE)” 527877-LLP-1-2012-1-UK-ERASMUS-ENW, <http://www.saleie.co.uk/>
2. 2013-2017 "Joint MSc in Electrical Engineering (JMEE)" 544644-TEMPUS-1-2013-1-UK-TEMPUS-JPCR, <http://blogs.salford.ac.uk/jmee/project-teams/>
3. Project ROBG-9 ARCHIVE - Ancient roman cultural heritage interactive visualization environment for the cross border area between Bulgaria and Romania, Project code 15.2.1.038, INTERREG V-A Romania – Bulgaria, <http://interregrobg.eu/en/2-categorie-principala/128-15-2-1-038-archive.html>
4. Project 2263 SFEDA - Forest Monitoring System for Early Fire Detection and Assessment in the Balkan-Med Area, INTERREG V-B "Balkan-Mediterranean 2014-2020“, <http://www.interreg-balkanmed.eu/approved-project/22/>
5. Project ROBG-499 LIVE - Live, interactive and virtual environments for the museums of the lower Danube cross-border area between Romania and Bulgaria, INTERREG V-A Romania – Bulgaria, <http://www.interregrobg.eu/en/component/content/article/2-categorie-principala/458-robg-499.html>
6. Project ASEAN FACTORI 4.0 (From Automation and Control Training to the Overall Roll-out of Industry 4.0 Across SouthEast Asian Nations) 609854-EPP-1-2019-1-FR-EPPKA2-CBHE-JP, <https://factori-erasmus-project.eu/>



SOME OF OUR (PROJECT) ACTIVITIES

3D Scanning





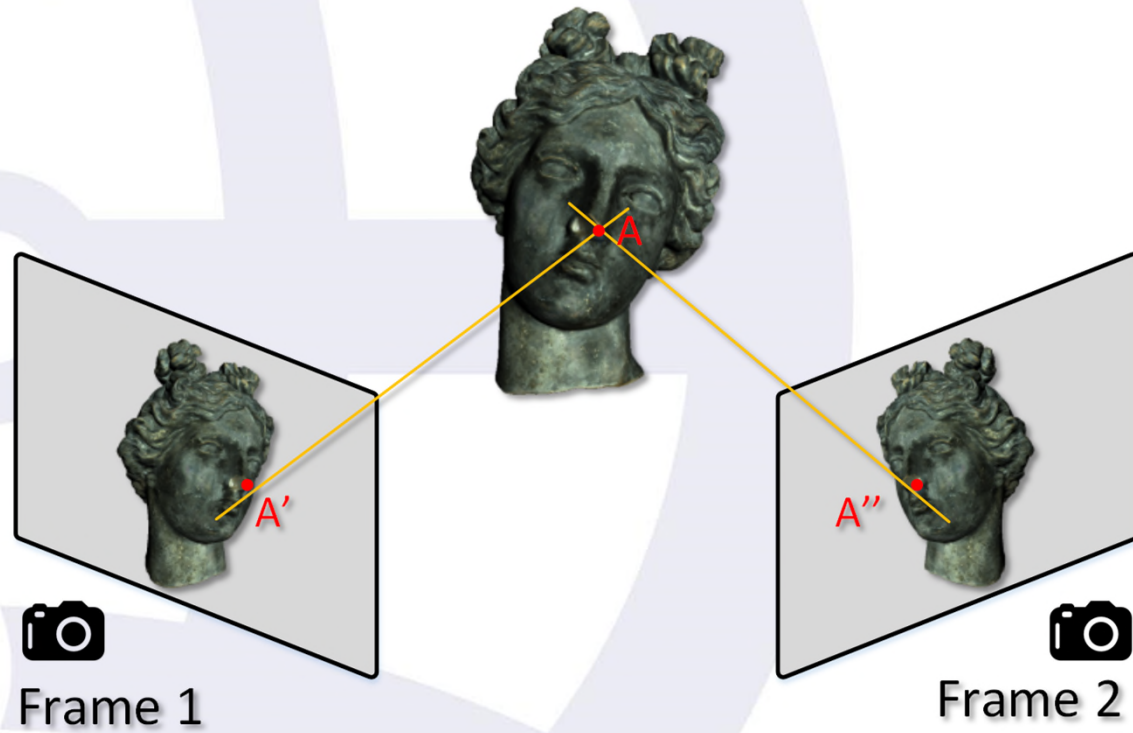
SOME OF OUR (PROJECT) ACTIVITIES

3D Scanning



SOME OF OUR (PROJECT) ACTIVITIES

Photogrammetry





SOME OF OUR (PROJECT) ACTIVITIES

Photogrammetry



SOME OF OUR (PROJECT) ACTIVITIES

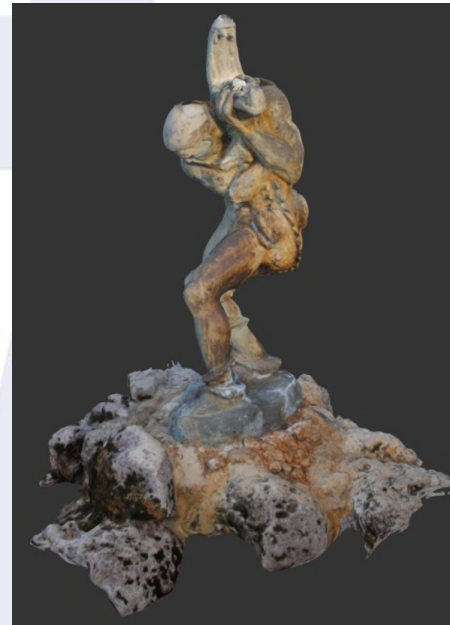
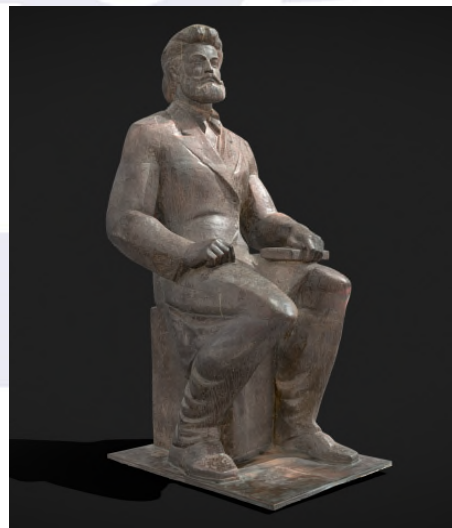
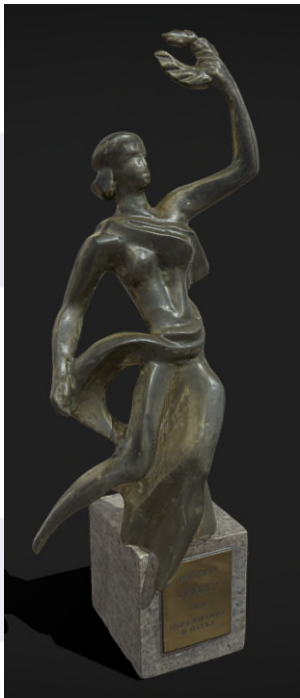
Digitalization of archaeological objects with drones





SOME OF OUR (PROJECT) ACTIVITIES

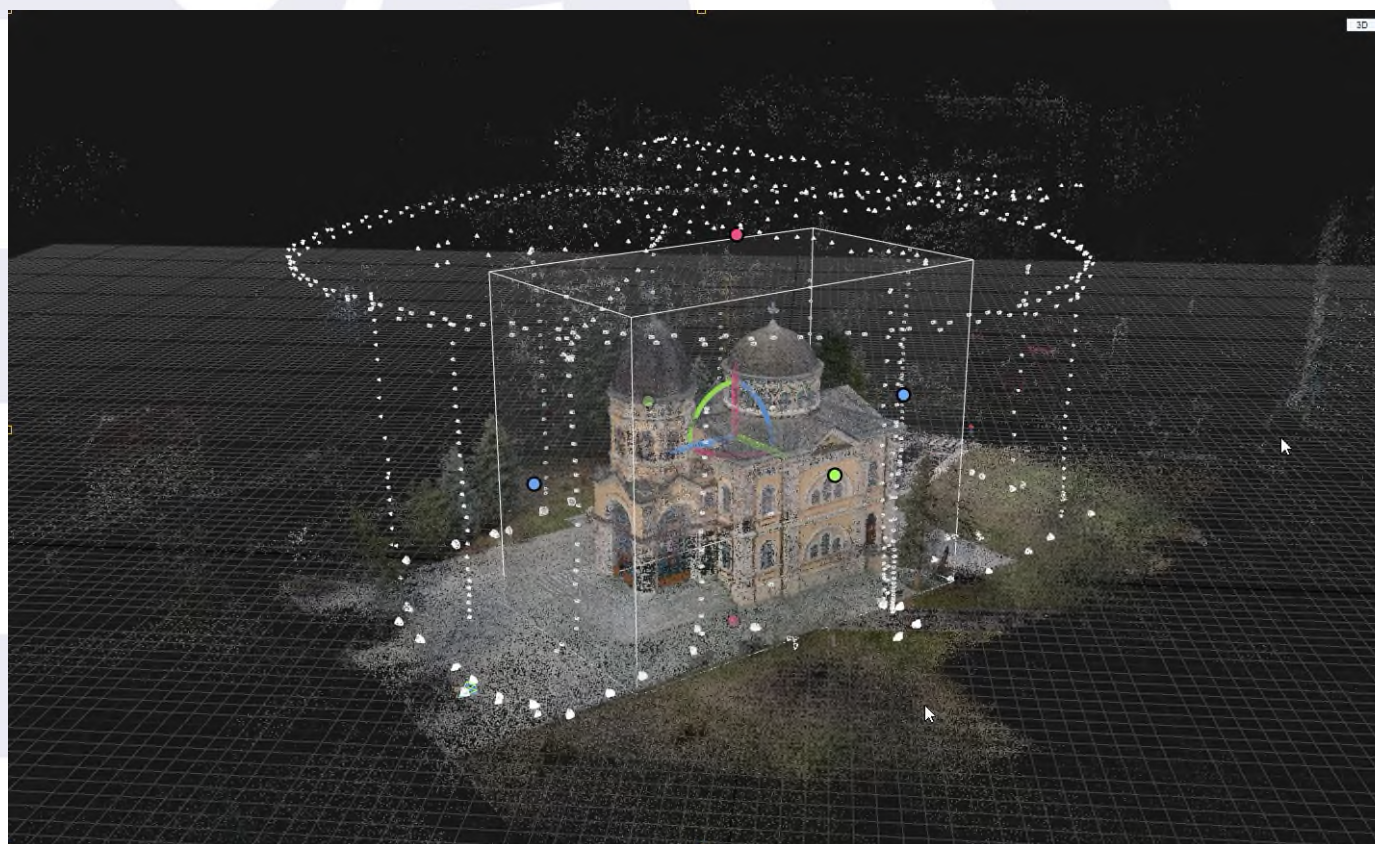
Digitalization examples





SOME OF OUR (PROJECT) ACTIVITIES

Digitalization examples





SOME OF OUR (PROJECT) ACTIVITIES

Digitalization examples



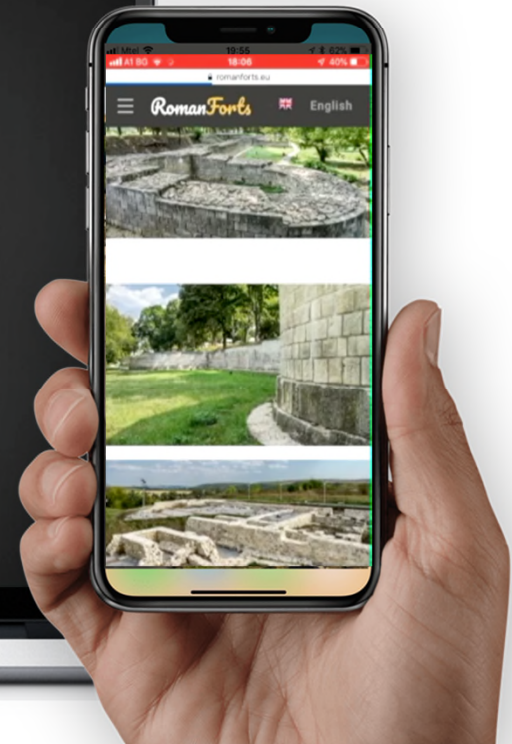
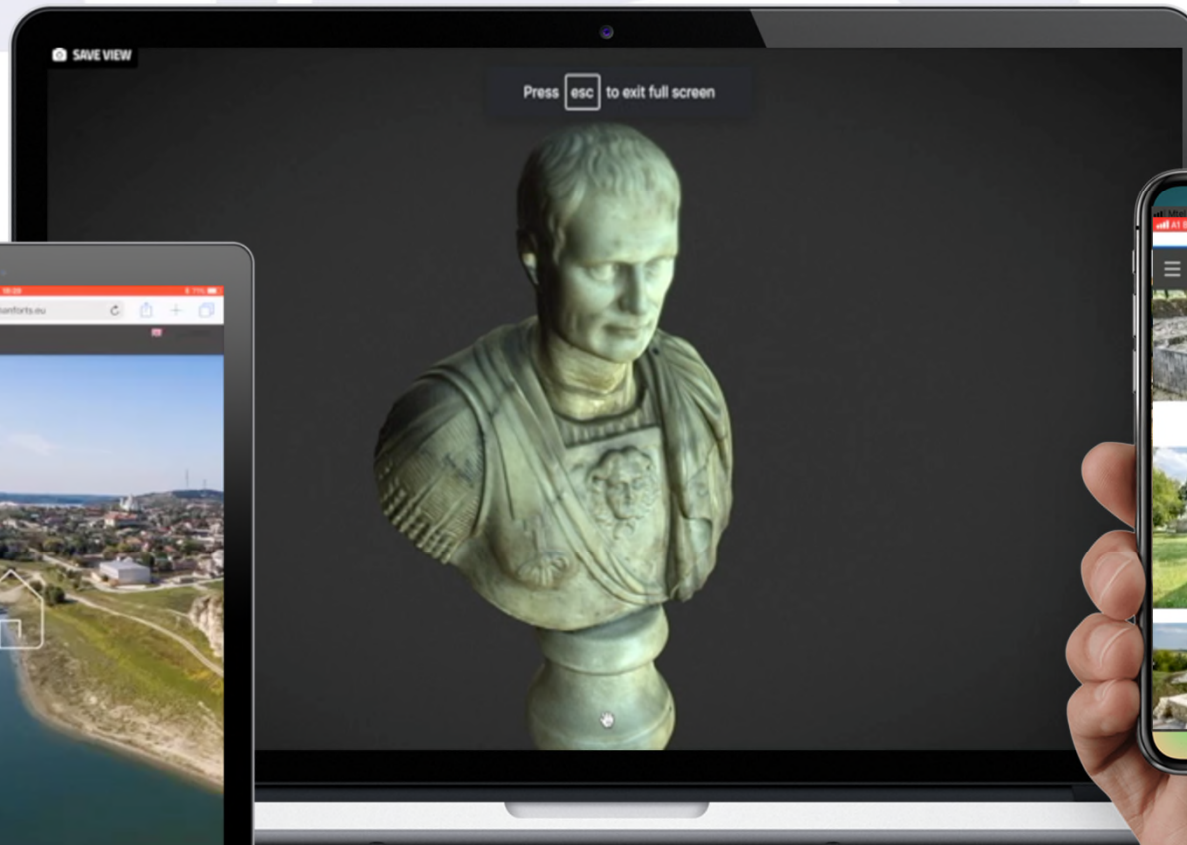
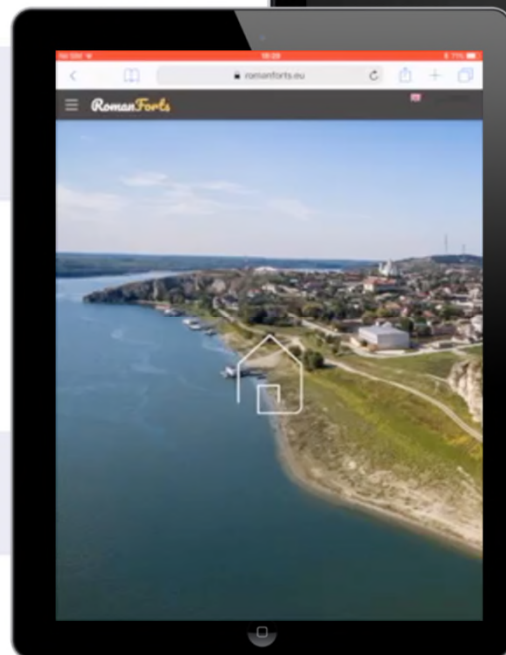


SOME OF OUR (PROJECT) ACTIVITIES

Development of interactive platforms and applications



MacOS





SOME OF OUR (PROJECT) ACTIVITIES

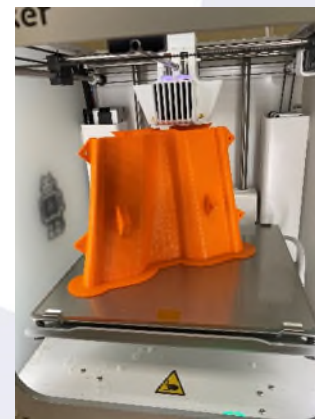
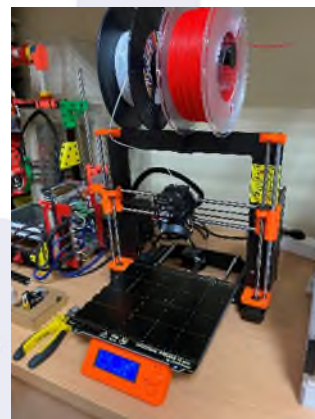
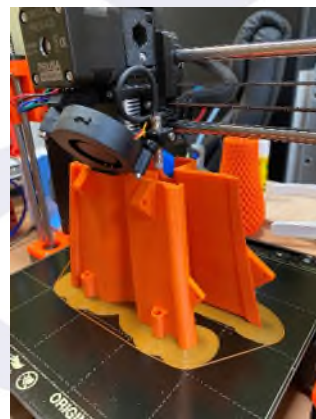
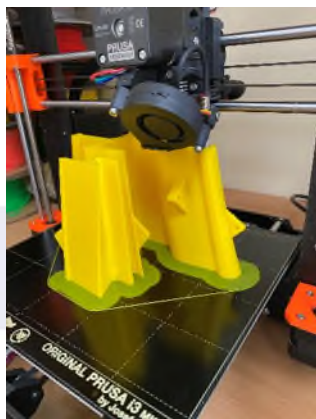
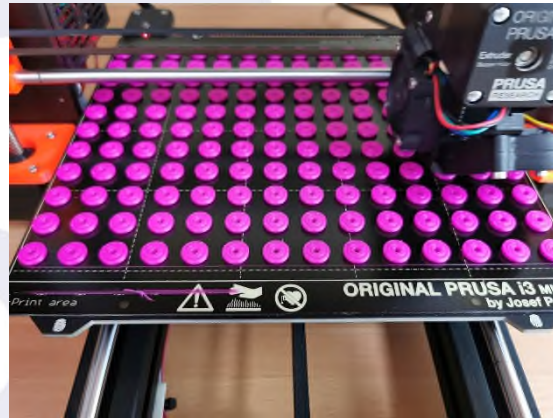
3D Printing and use of additive technologies





SOME OF OUR (PROJECT) ACTIVITIES

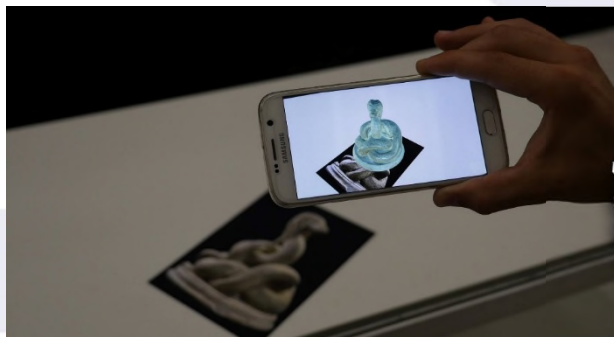
3D Printing and use of additive technologies





SOME OF OUR (PROJECT) ACTIVITIES

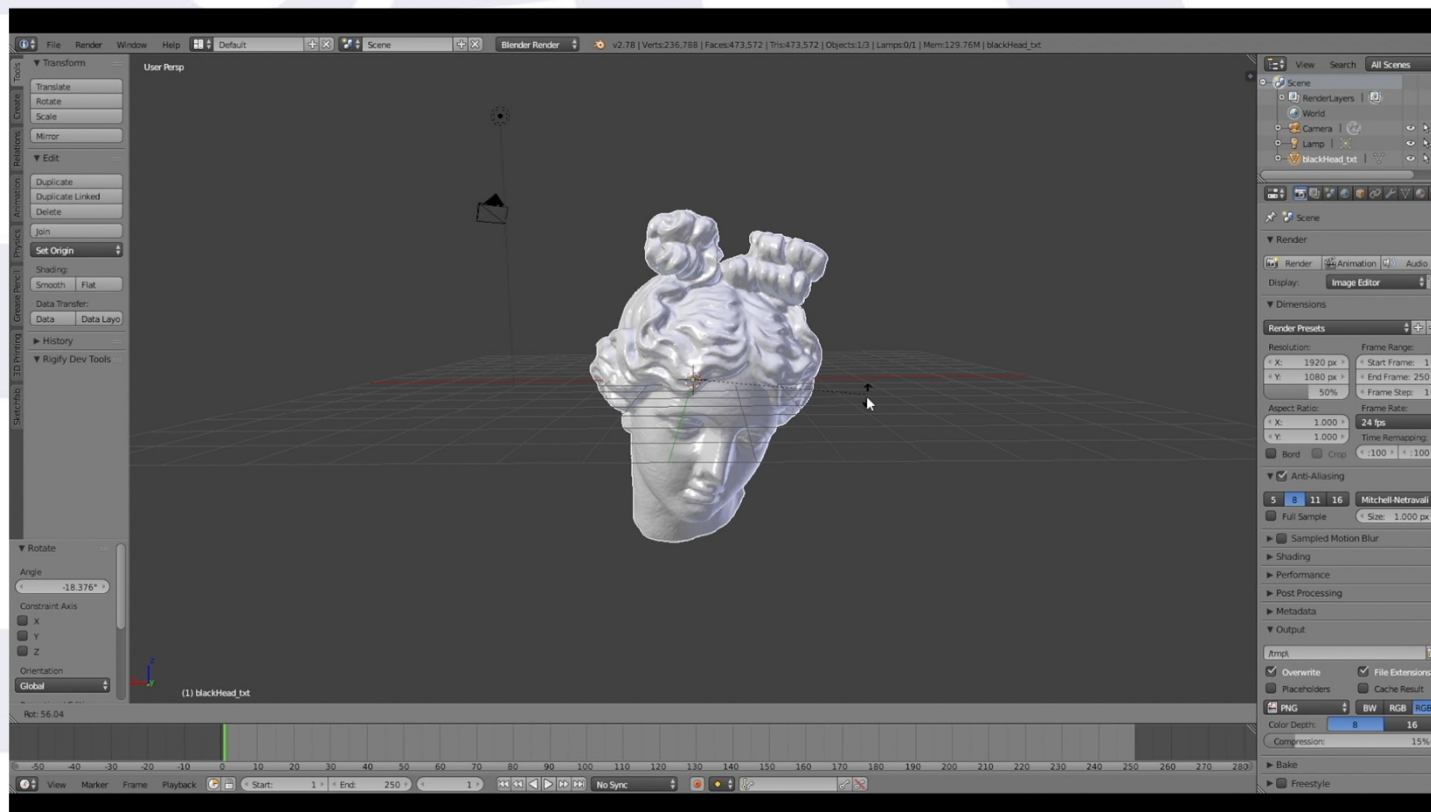
Development of products with Augmented Reality





SOME OF OUR (PROJECT) ACTIVITIES

Development of Virtual Reality solutions





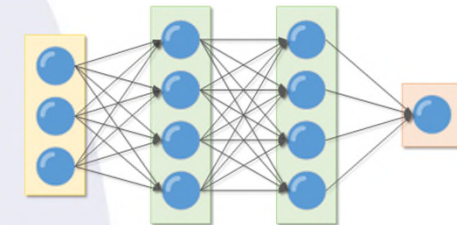
SOME OF OUR (PROJECT) ACTIVITIES

Developments of interactive products and books



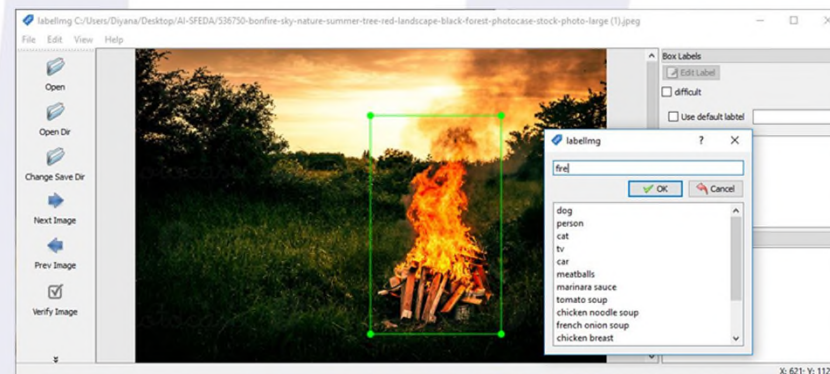
SOME OF OUR (PROJECT) ACTIVITIES

Early forest fire detection using computer vision and artificial intelligence



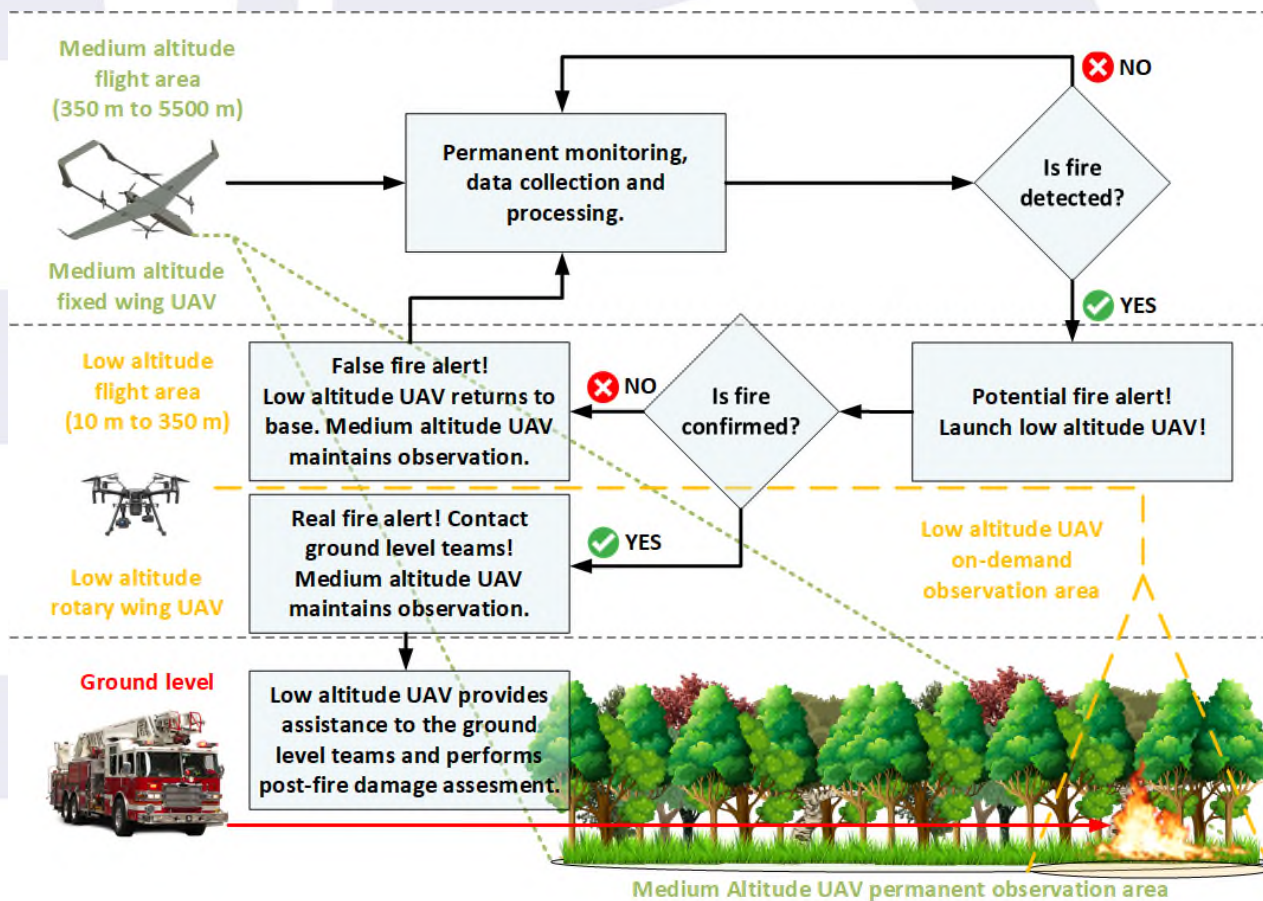
 **TensorFlow**
Training the neural
network

*Preparing the input
dataset - gathering
and labeling images*



SOME OF OUR (PROJECT) ACTIVITIES

Early forest fire detection using computer vision and artificial intelligence





SOME OF OUR (PROJECT) ACTIVITIES

Early forest fire detection using computer vision and artificial intelligence



SOME OF OUR (PROJECT) ACTIVITIES

Early forest fire detection using computer vision and artificial intelligence

☰ Main

Interreg
Balkan-Mediterranean
SFEDA

Chart of fire danger percentage

Time	Danger
9 Jun 2020 16:12:37	51%
9 Jun 2020 16:12:27	0%
9 Jun 2020 16:12:17	0%
9 Jun 2020 16:12:7	0%

UNIVERSITY OF RUSE
"ANGEL KANCHEV"

● Fire Alarm

Fire probability

94

0 Percentage 100



SOME OF OUR (PROJECT) ACTIVITIES

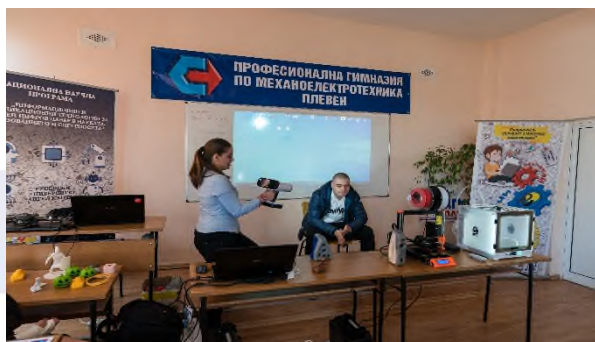
Educational and training events





SOME OF OUR (PROJECT) ACTIVITIES

Educational and training events





Thank you for your attention!

Contacts

**Plamen Zahariev, pzahariev@uni-ruse.bg
University of Ruse "Angel Kanchev"
Department of Telecommunications
Studentska str. 8, Ruse 7017, Bulgaria
Phone:+359 82 888 663, Fax:+359 82 888 841**

2020-1-RS01-KA226-HE-094527

Co-funded by the
Erasmus+ Programme
of the European Union

