

Employment

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| Teaching Assistant | West University of Timișoara | Fall 2016 - Present |
| <ul style="list-style-type: none"> • Instructor for the "C Programming" lecture • Instructor for the "Algorithms and Data Structures I and II" lecture | | |
| Software Developer | West University of Timișoara | September 2016 - Present |
| <u>European Space Agency EO4SEE Pathfinder project (December 2016 - January 2018)</u> <ul style="list-style-type: none"> • Implementing WPS 2.0 capabilities for the project's backend processing facilities. Implementing a new WPS 2.0 Server on top of an existing batch resource manager (HTCondor) <u>European Space Agency Mathlib4space (September 2016- March 2018)</u> <ul style="list-style-type: none"> • Benchmarked mathematical functions from different C mathematical libraries. | | |
| Researcher | Institute e-Austria Timișoara | February 2015 - Present |
| <u>CloudLightning H2020 Project (2015 - 2018)</u> <ul style="list-style-type: none"> • Developed Alien4Cloud plugin exposing the functionality provided by the CloudLightning Project; • Extended the Brooklyn-Tosca to properly support various TOSCA extensions in order to enable deployment of Cloudlightning applications | | |

Education

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| Timișoara, România | West University of Timișoara | Fall 2012 – Present |
| <ul style="list-style-type: none"> • Phd student Computer Science. • MSc in Computer Science. Completed in 2017.; Thesis: Investigate and analyse the processing of Earth Observation images(semantic segmentation) using Machine Learning techniques: Preprocessing satellite images using a tiling strategy to divide them in smaller sizes. Applied semantic segmentation CNN architectures. Proposed a strategy based on entropy for pixel result aggregation. Technologies used: Python, Keras with Google TensorFlow backend • BS in Computer Science. Completed in 2015. Graduated with Honors; Thesis: Digital Heritage Preservation Systems Java application with a web UI, that allows users to download the desired web pages, in order to preserve their content. Also, the users may search through the content of the saved web pages. Technologies used: Java, Heritrix, Apache Solr, Spring Boot, Twitter Bootstrap. • Module I, II of the Psycho-Pedagogical Training Program | | |

Additional Experience and Awards

- **February 2016-Present** Coordinating on behalf of the Faculty of Mathematics and Informatics and Volunteer Mentor at CoderDojo Timișoara: Teaching Python and Scratch Programming Skills every Saturday to a young group of children (10-12 years old)
- Participant at **PRACE Autumn School 2016** Austria and **PRACE Spring School 2017** Cyprus
- 24th Szeged Summer School on Image Processing 2016: Developed an application that identifies various features from a grey-scale OCT image of human eye retina. Won 2nd prize in the final projects competition.
- Ingeniously Continental Contest Timișoara 2014: Developed two Android applications: one could connect to a mini-robot car and act as a "car windshield", using the image from the smartphone's camera and displaying the velocity of the car; the other one acted as a remote control for the car

Scientific Papers as First Author

- T. Selea, M. Neagul, Using Deep Networks for Semantic Segmentation of Satellite Images, Synasc 2017, Geoinfo Workshop
- T. Selea, M. Neagul, S. Panica, HTCondor backed WPS Service, **ACM WomENCourage 2017**
- T. Selea, I. Dragan, F. Fortis, The CloudLightning approach to cloud-user interaction, CloudNG:17 Proceedings of the 1st International Workshop on Next generation of Cloud Architectures
- T. Selea, A. Spataru, M. Frincu, Reusing Resource Coalitions for Efficient Scheduling on the Intercloud, Procs. 16th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid), IEEE Press, 2016