

## Experience

- 2016  
Serbia **Student researcher, Microsoft research summer school**  
*News articles and comments corpus preprocessing*  
Developed an efficient pipeline for preparing a text corpus for training, validation and test sets for few different machine learning algorithms using Java and Stanford NLP libs.
- 2015  
Serbia **Software Engineer Intern, Cardea d.o.o.**  
*QR code cards for elementary schools*  
Developed backend logic for Android application for customized tablets to help in navigation and class scheduling. Proof of concept in MATLAB, productionized in Java.
- 2014  
Germany **Engineer Intern, University of Siegen**  
*Architecture and specification of SIP protocol for Compressive Sensing*  
Extended the specification for SIP protocol to enable Compressive Sensing data transmission, and verified it with MATLAB and Java implementations.
- 2013  
Brazil **Software Engineer Intern, Hardware Development Laboratory, INATEL**  
*Control software for Agilent and Anritsu instruments*  
Developed software in Python for several lab instruments, as part of the statewide project for expanding digital television in Brazil.
- 2012  
Serbia **Engineer Intern, National Agency for Electronic Comm.**  
*Interoperability of antenna radiation pattern*  
Created format and developed software to transfer radiation pattern of antennas from the EMLAB software package to the ATDI Telecom software package.

## Academic projects

- 2014-2017 **Student-researcher, University of Belgrade**  
*Research in multirate systems - CIC FIR decimation filters*  
Analyzed and integrated two-stage linear-phase comb-based FIR filter in order to improve pass-band droop and increase maximum stop-band attenuation for high-order digital filters with analysis of sharpening methods responsible for pass-band droop correction.
- 2012-2014 **Student-assistant, University of Belgrade**  
*MIMO systems, Telecommunication Measurements 1 and 2*  
Led a team of assistants in preparation and execution of planned exercises, and helped professor in writing guidelines for lab exercises and in conducting quizzes.
- 2013 **Thesis for Undergraduate studies, University of Belgrade**  
*Cognitive radio – Simulation of MAC protocol*  
Developed a simulation of MAC protocol usage patterns in Cognitive radio networks.

## Education

- 2014-2017 **PhD dropout, Digital Signal Processing**  
*School of Electrical Engineering, University of Belgrade, Serbia*
- 2013-2014 **Master of Engineering in Systems Engineering**  
*School of Electrical Engineering, University of Belgrade, Serbia*
- 2009-2013 **Bachelor of Science in Electrical Engineering and Computer Science**  
*School of Electrical Engineering, University of Belgrade, Serbia*

## Published papers

- 2016 *Implementation of Some Types of Modified CIC Decimator*, J Certic, **M Katic**, L Milic, ETRAN
- 2015 *Multi-stage Comb-based Decimation Filter*, **M Katic**, J Certic, TELFOR