

MLADEN BAŠIĆ

EXPERIENCE

Machine Learning Intern

Microsoft Development Center Serbia

📅 Oct 2021 – Mar 2022

- Worked on a model for premium feature upselling based on user actions in Word Online
- Collaborated with software engineering team on feature extraction and model deployment
- Wrote queries for big data parsing from a preexisting database

Python Sequence Classification Kusto Query Microsoft Office

Software Engineering Intern

Microsoft Development Center Serbia

📅 Feb 2021 – May 2021

- Improved camera head position estimation software by implementing a complementary filter on head tracking system from HoloLens2 and Azure Kinect's head localization software
- Developed software pipeline for synthetic camera calibration, testing and 3D pose estimation
- Ran experiments using real-world calibration data and tested quality of intrinsic calibration after an airplane travel simulation

Python Camera Calibration Mixed Reality

Assistant at Petnica Science Center

Department of Applied Physics and Electronics

📅 2018 – present

- Held lectures in Linear Algebra, Image Processing and Natural Language Processing
- Held workshops in Physics Simulation, Digital Signal Processing and Natural Language Processing
- Supervised project: *Hybrid Model for Sentence Completion*

PROJECTS

Relative Camera Pose Estimation

Petnica Science Center Machine Learning Seminar

📅 summer 2020

- Developed a model that estimated relative change of camera position between two frames
- Model consisted of two identical AlexNets and a fully connected output layer which returns relative translation and rotation in quaternions
- Training was done on car driving dataset

Python PyTorch KITTI Dataset

Automatic Extractive Summarization of Multiple Documents

Petnica Science Center

📅 summer 2018

- Multi-document extractive summarization done on news articles
- Text ranking done using Recursive Neural Network that traversed through the sentence tree and scored every n-gram leaf to root
- Sentence selection was realized using greedy approach on scored sentences, discarding ones that have a set percentage of similar words

Python TesnorFlow DUC Dataset

📍 Belgrade, Serbia
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🐙 github.com/basicskill
🌐 linkedin.com/in/basic-mladen

EDUCATION

B.Sc. in Electrical Engineering and Computer science (expected)

University of Belgrade

📅 2018 – 2022

Signals and Systems Department
Ongoing GPA: 9.3 / 10

PROFESSIONAL SKILLS

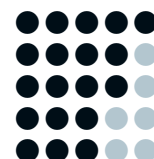
Python

MATLAB / Octave

C++

Bash

Git



LANGUAGES

English

Serbian (native)



FACULTY WORK

Undergrad Teaching Assistant

Object Oriented Programming
Course

📅 2020

- Homework and final project grading
- Conducting oral examinations

Member of ETF Robotics group

Renesas MCU Rally Faculty team

📅 2019

- Developed physics simulation of model vehicle with noisy sensors and localization
- DC motor testing and attribute measuring

OTHER

Hackathons

- SUMA MATF Hackathon:
Pollution Prediction
🐙 basicskill/matf-hackathon
- TUM-JA Hackathon:
Crowdedness of Public Transport
🐙 basicskill/tum-hackathon

Smaller Projects

- Word Recognition from Gyroscope Signals (MATLAB)
- Handwritten Digit Recognition (Neural Network from Scratch) (MATLAB)
- Digital Circuit Simulator (C++)
- DataFlow Equation solver (C++)