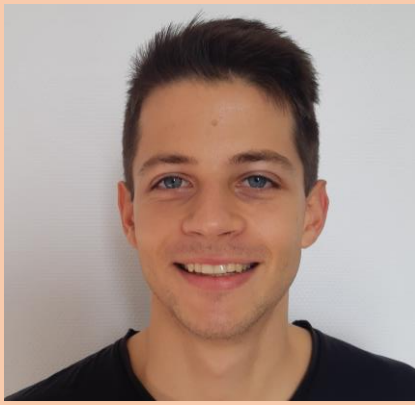
PETER SZABO

I am currently working in the automotive industry working with driving assistance and self-driving technologies. My field of interest is Deep Learning related to Computer Vision technologies, but I am also ready to discover new areas. I am currently looking for an opportunity to apply my knowledge in research and continue to grow my expertise.



fjuzi22@gmail.com

WORK EXPERIENCE

Junior Computer Vision Engineer *Oct. 2021 – Present*

Continental (Budapest, Hungary)

Development of camera-based driving assistance systems using deep learning, using Object detection, Sign Recognition and Sematic Segmentation

Research Intern *Jan. 2021 – June 2021*

Vicomtech (San Sebastian, Spain)

Full-time master thesis: Enhancing 360° VR Experiences with Machine Learning-based Multisensorial Effects, part of EU Horizon 2020, TRACTION (No 870610) in collaboration with Dublin City University.

Full-stack developer *June 2019 – Jan. 2020*

MODIT zrt., Budapest, Hungary

Digitization of Hungarian Adaptation System in Java EE and Angular.

Research Intern *Feb. 2018 - Jan. 2019*

SZTAKI (Institute for Computer Science and Control), Budapest, Hungary

Research internship at Machine Perception Research Laboratory (Hungarian Academy of Sciences) as a part of a medical image processing project: zMed.

EDUCATION

Image Processing and Computer Vision Erasmus Mundus Masters *2019 – 2021 (June)*

PPCU, Hungary · UAM, Spain · Ubx, France

Specialized Erasmus Mundus Triple Dergree Master's with a wide range of topics. GPA of 4.55/5. http://ipcv.eu/

Molecular Bionics Engineering B.Sc *2015 - 2019*

PPCU, Budapest Hungary

PROJECTS AND PUBLICATIONS

A CNN-base Framework for Enhancing 360 VR Experiences with Multisensorial Effects

Publication of master thesis in IEEE Transactions on Multimedia (Impact factor: 6.513)
DOI: 10.1109/TMM.2022.3157556

Enhancing 360° VR Experiences with Machine Learning-based Multisensorial Effects: [code, tutorial, dataset]

Master thesis in designing novel solutions for enhancing 360° VR content with multimedia (olfactory and haptic) input, working on Oculus Quest 2.

FaceQNet:

Exploring the impact of masks on face quality assessment and proposing and proposing solutions for FaceQNet. Evaluating in challenging environmental scenarios and improving it.

3D Reconstruction of the Hepatic Vessels:

Automatic segmentation and labeling of hepatic vessels from raw CT images.

Corona AR: [report]

Interactive AR game on Microsoft Hololens in Unity.

Object Detection and Tracking: [code]

Kalman filter and histogram-based approaches.

3D Scene Reconstruction through Multiple Images [code]

3D Scene reconstruction from multiple images and camera calibration.

More information on my website

SKILLS

Python, Matlab, C++, Java, Html, Javascript, SQL

OpenCV, Keras, Pytorch, Sckit, Unity, CUDA, Docker, Tensorflow

Latex, Linux, Git

agile, SAFe, self learning and management, academic writing, teamwork, communication skills, problem solving, teaching

LANGUAGES

English: professional proficiency

German: conversational

Hungarian: native

Spanish: conversational

AWARDS

Erasmus Mundus Scholarship (2019

3rd place at **National Conference of Student Research Societies** (OTDK) in Hungary (2019)

UNKP scholarship New National Excellence Program by of the Ministry of Human Capacities of Hungary (2018)

Honours Bachelor degree (2019)

For more information about the projects open the QR code