Postdoctoral Fellowship: Computer vision&Machine Learning; University of Zagreb, Faculty of electrical engineering and computing (FER), Croatia

An opening is available for Post-Doctoral Fellow at the University of Zagreb, Faculty of electrical engineering and computing (FER), <u>SHARK Lab</u> (Advanced Shape Reconstruction and Registration Laboratory), Croatia, in the area of AI/Computer vision/Machine Learning with application in Healthcare/Anthropometric measurements.

The opening is available under the of <u>Croatian Science Foundation project</u>: **Smartphone and Tablet Extraction of Anthropometric Measurements (STEAM)**. Anthropometric measurements are of particular interest to a large group of beneficiaries since nowadays anthropometry plays an important role in industrial design, clothing design, ergonomics, medicine and architecture where statistical data about the distribution of body dimensions in the population are used to optimize various products and services.



STEAM project collaborators are experts coming from several renowned research institutions: University of Girona (Spain), TU Dresden (Germany), University of Toulouse (France), University of Yamagata (Japan) and Shenzhen Institutes of Advanced Technology (China). Additionally, three private companies are collaborating as well: Peharec Polyclinic (Croatia), Hometrica Consulting (Switzerland) and BodyRecog Metrics (USA).

Postdoctoral position is open for 24 months. Starting date: March, 2021.

Responsibilities:

to lead and conduct the advanced research on the project STEAM by:

- developing state-of-the-art 3D reconstruction algorithms on mobile platforms (smartphone and tablets)
- developing state of the art algorithms to estimate anthropometric measurements, combining 2D image and 3D data from mobile platforms
- publishing research results in peer-reviewed conferences and journals
- interfacing with stakeholders, including industry, graduate students, and other faculty.

Expected qualifications:

- PhD degree in computer science or related engineering degree
- Excellent programming skills on Android and/or iOS platform.
 - Highly desired: experience with data science tools including Python scripting, with at least one main stream deep learning framework (e.g. tensorflow), computer vision or robotics libraries (e.g., OpenCV, PCL, ROS), CUDA/OpenCL.
- Solid understanding of linear algebra, algorithms, computer vision and machine learning, optimization, numerical methods
 - Highly desired: strong experience working in 3D reconstruction from images and applying machine learning to 3D reconstruction and human body modelling
- Record of peer-reviewed publications
- Excellent oral/written communication skills and interpersonal skills

To apply or for questions about the position, please email a copy of your CV, two references and cover letter outlining fit for the position. Review of applications will continue until the position is filled.

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Professor

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