



THESIS ASSIGNMENT

Name and Surname: Michal Baránek
Study programme: Applied Computer Science (Single degree study, bachelor I. deg., full time form)
Field of Study: Computer Science
Type of Thesis: Bachelor's thesis
Language of Thesis: English
Secondary language: Slovak

Title: Comparing Synthetic and Real Data for Anthropometric Measurements Estimation

Annotation: Human body measurements estimation is a task that attracts the attention of several scientific fields in recent years. An automatic and accurate approach to this problem is crucial in various areas of the computer vision-oriented industry. Garment manufacturing and tailoring are some of the applications, where an accurate body measurements estimation from visual human data would be beneficial, replacing the traditional manual tape measuring.

Aim: The goal of the bachelor thesis is to study the task of body measurements estimation. The aim is to test selected state-of-the-art deep learning methods and evaluate them using both synthetic and real human body data. In this way, we aim to analyze the domain gap and explore the benefits of augmenting real data with synthetic images for training purposes.

Keywords: body measurements, neural networks, deep learning

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Department: FMFI.KAI - Department of Applied Informatics
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Approved: 04.10.2023 doc. RNDr. Damas Gruska, PhD.
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