Project Management and Software Development

A Vision Based Anthropometric Scanner
Intermediate Presentation

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4 weeks ago...

Buying a bicycle

http://www.wikihow.com/Buy-a-Bicycle

It’s not that simple!
Project Overview

A vision based anthropometric Scanner

May 24, 2016  Slide 3
Week 1…

Literature Review

- Bicycle fitting
- Camera calibration
- Human pose estimation via DNNs
Week 2…

Getting in action

• Procedure breakdown
• Understanding previous codes
• Debuging & Executing
Procedure breakdown

Network
- Training
- Testing
- Packing

Software Protocol
- Taking picture
- Pose estimation
- Calculations

Visualization
- Visualizing the results
Network

- Implemented in Matlab using MatConvNet.

- Convolutional Neural Network.

- Trained using the Leeds Sports Pose Dataset.
Week 4…

Software Protocol

Camera Calibration

- Tens of images with Bicycles.
- Tires detected.
- Tires radiiuses and centers distance calculated.
Real pose estimation

- Bicycle detected
- Calculation in relation to bicycle real measurements.
A vision based anthropometric Scanner
Thank you!