Software Defined Networking for Multi-Camera Systems

Multi-Camera Systems:
• Dynamic configuration needed
• Easy network control necessary
• Current technology: hard to control

Software Defined networking:
• Separation of control and data plane
• Dynamic and direct control
• Controller decides flow of traffic

Objectives:
• Investigation of possibilities of SDN for Multi-Camera Systems
• Investigation of scalability
• Creation of use case

Use Case – soccer pitch:
• Localization of ball in certain zone of field
• 2 cameras work together for 3D images: path needed
  • Dynamically: location of ball can change
• Location of ball → REST API → network controller module → retrieve camera information from SQL database → create path between 2 nodes → block superfluous traffic

Promotoren / Copromotoren: Prof. Dr. Ir. Luc Claesen – Hasselt University (BE)
Prof. Dr. Chen Chien – National Chiao Tung University (TW)