**TNT-IIP Individual Implant Placement**

**Body:**

**Motivation**
First we connect to Cluster 1 (Performance Analysis): Dr. Ackermann, a PostDoc at TNT, started to collaborate with L3S members in the area of data factorization. Using subspace concepts with a clear geometric intuition, we expect new research ideas for missing data estimation, recommender systems and event analysis. Additionally, we are collaborating with L3S members in the area of action recognition and suggest process parameter optimization using Bayesian approaches or Random Forests. Furthermore, we are working on image classification in large image datasets.

**Challenges & Highlights**
The main challenges are the variability and data complexity of web content. In collaboration with Prof. Magnor from the TU Braunschweig, we plan the submission of a DFG-proposal (supported by a Synergy Grant) in the area of Monocular Human Performance Capture. This will lead to a strong connection to our ERC-PoC-project IIP. Other work will concentrate on:

- Factorization
- Graph Based Optimization (Graph Cut, Minimal Spanning Trees, Linear Programming)
- Morphable Shape-Motion Models

**Potential Applications & Future Issues**

- Software development under the PoC project (for surgery planning)
- Recommender Systems
- Pattern recognition either for user classification or for event detection
- Social pervasive Computing

**Project abstract:**
As new group at the L3S, our first goals are to connect to existing group members at the L3S and to cross-fertilize research through a close exchange between challenges from the web observatory with existing methods from the TNT. Among other projects, we integrated the PoC-project “Individualized Implant Placement” at the L3S with the goal of bridging the recent ERC-grantees (Prof. Dr. techn. Wolfgang Nejdl, Prof. Dr.-Ing. Markus Fidler, Prof. Dr.-Ing Bodo Rosenhahn and prospectively Prof. Dr.-Ing. Marcus Magnor) at the L3S.

**Logo:**

![Image of a hip with an implant]
Society and Innovation

**Project type:**
Proof-Of-Concept (ERC)

**Research Area:**
Next Generation Internet

**Status of the Project:**
Bibsonomy show project publications:
1
Bibsonomy use tabs to list publications:
1