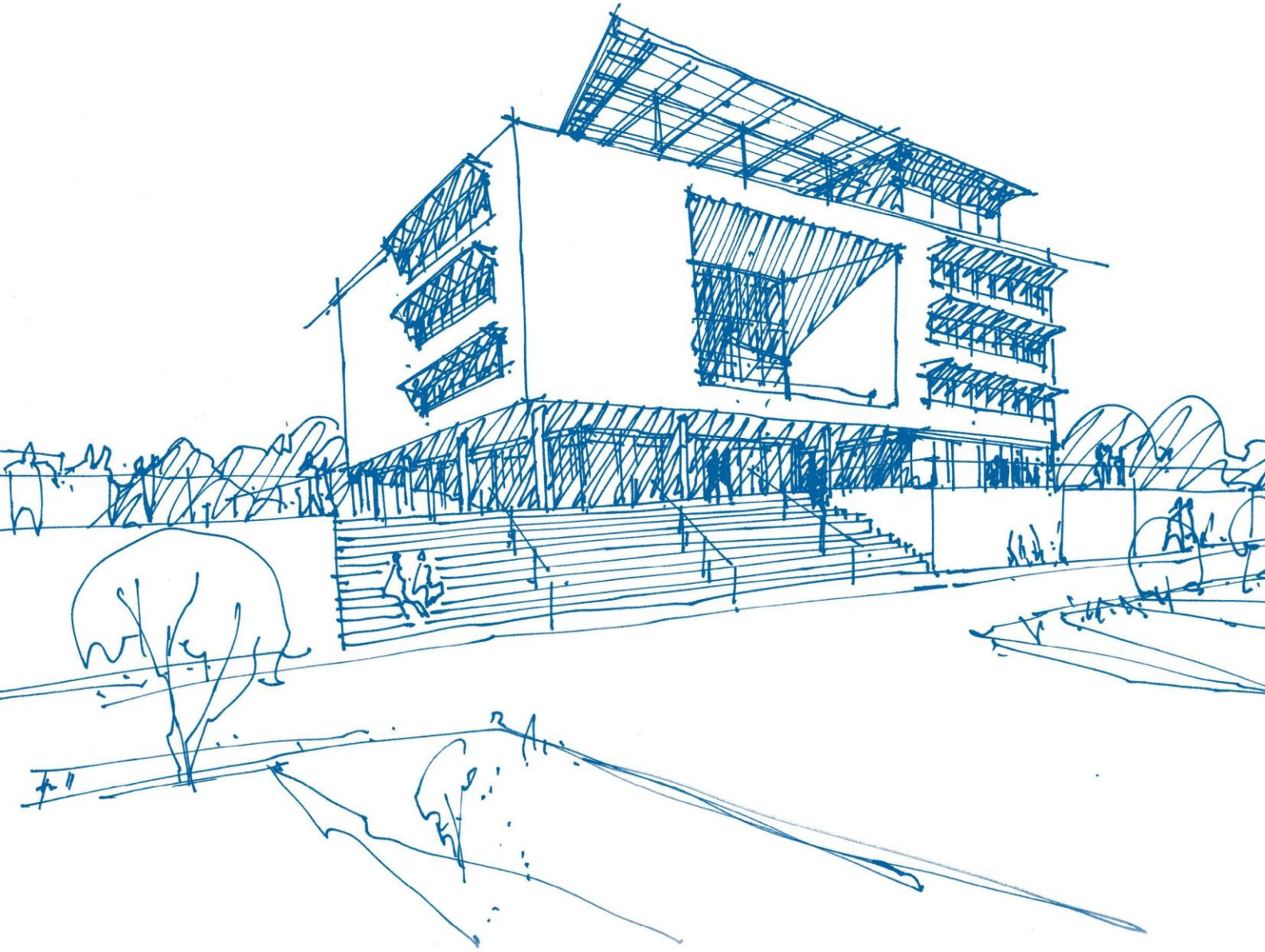
IAS

Machine Learning for 3D Understanding

Workshop

July 2-4, 2018

Program



MONDAY, JULY 2, 2018

08:45 **Opening**

9:00 **Semantic Understanding of 3D Scans**
Matthias Nießner (TUM)

09:30 **Learning to Complete 3D Scans**
Angela Dai (Stanford University)

10:00 **Supervised, Self-Supervised, and Reinforcement Learning for 3D Understanding**
Alexey Dosovitskiy (Intel)

10:30 *Coffee Break (Foyer)*

11:00 **Structured Prediction for Shape Correspondence**
Emanuele Rodola' (University of Rome "La Sapienza")

11:30 **Geometric Deep Learning on Graphs and Manifolds Using Mixture Model CNNs**
Federico Monti (University of Lugano/Fabula AI)

12:00 **Deformable Shape Completion**
Ameesh Makadia (Google)

12:30 *Lunch Break (Faculty Club, 4th floor)*

14:00 **Deep Learning for Analysis and Fitting of Deformable Models**
Stefanos Zaiferiou (Imperial College)

14:30 **Learning to Align Images With Surfaces**
Iasonas Kokkinos (University College London / Facebook)

15:00 **Imaging Genetics of the Human Face**
Peter Claes (Catholic University of Leuven)

15:30 *Coffee Break (Foyer)*

TUESDAY, JULY 3, 2018

9:00 **Small 3D – Prediction of Molecular Properties**
Vladimir Golkov (TUM)

9:30 **End-to-End Differentiable Learning of Protein Structure**
Mohammed AlQuraishi (Harvard University)

10:00 **Geometric Deep Learning to Describe Protein Functional Surfaces**
Pablo Gainza-Cirauqui (Ecole Polytechnique Fédérale de Lausanne)

10:30 *Coffee Break (Foyer)*

11:00 **Accurate and Realistic Cloth Modeling From Real-Data**
Zorah Laehner (TUM)

11:30 **Interaction-Guided Joint Scene and Human Motion Mapping from Monocular Videos**
Niloy Mitra (University College London)

12:00 **Photorealistic Human Digitization and Rendering Using Deep Learning**
Hao Li (University of California, San Francisco)

12:30 *Lunch Break (Faculty Club, 4th floor)*

14:00 **Weakly Supervised 3D Human Pose Estimation from a Single Image**
Lourdes Agapito (University College London)

14:30 **Divergence-Free Shape Correspondence and Interpolation**
Marvin Eisenberger (TUM)

15:00 *Coffee Break (Foyer)*

WEDNESDAY, JULY 4, 2018

9:00 **SOSELETO: A Unified Approach to Transfer Learning and Training with Noisy Labels**
Or Litany (Technion)

9:30 **PeerNet: Exploiting Peer Wisdom Against Adversarial Attacks**
Jan Svoboda (University of Lugano / Nnaisense)

10:00 **Deep Fundamental Matrix Estimation**
René Ranftl (Intel)

10:30 *Coffee Break (Foyer)*

11:00 **Using Pointnet Architectures in Autonomous Driving**
Leonidas Guibas (Stanford University)

11:30 **Tba**
Paul Guerrero (University College London)

12:00 **Dynamic Graph CNN for Learning on Point Clouds**
Michal Bronstein (Imperial College / University of Lugano / Intel)

12:30 *Lunch Break (Faculty Club, 4th floor)*

14:00 **Closing**