Open Problems in Computer Vision & Generative Modelling

ELLIS Society and the DAGM invite to an international workshop on "Open Problems in Computer Vision & Generative Modelling" hosted by the BAdW and organized by Björn Ommer (LMU Munich). This workshop aims to discuss the major challenges and the most promising future research directions in computer vision, particularly in light of the rapid advancements in generative modeling. Leading experts from the field will present their views, and there will be ample time for lively, thought-provoking discussions involving the audience.

OPEN PROBLEMS IN COMPUTER VISION AND GENERATIVE MODELLING

Workshop

JULY 17/18, 2024

9:00 AM

Foto von Google DeepMind über pexels.com

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Program

WEDNESDAY, JULY 17, 2024 (BADW, SITZUNGSSAAL 1)

8:30 AM Registration

9:00 AM Welcome

9:15 AM **PIETRO PERONA** (Caltech)
Algorithmic bias in computer vision: an experimental approach using generative methods

10:00 AM Coffee Break

10:30 AM **THOMAS BROX** (University of Freiburg)
Plausibility, critics, and world models

11:15 AM **LUCAS BEYER** (Google Brain Zurich)
Computer vision in the age of LLMs

12:00 PM Lunch

1:15 PM **AMIR ZAMIR** (EPFL Lausanne)
Multimodal learning on tens of modalities

2:00 PM Coffee Break

2:30 PM **CHRISTIAN RUPPRECHT** (University of Oxford)
Computer vision during the time of scaling.
What is left?

3:15 PP **ISHAN MISRA** (Facebook AI Research)
Beyond pretty pictures: What's needed to make generative visual models useful?

4:00 PM **PANEL DISCUSSION**
(Pietro Perona, Thomas Brox, Lucas Beyer, Amir Zamir, Christian Rupprecht, Ishan Misra, Alexei A. Efros)

5:00 PM Extended Break

6:30 PM Munich AI Lecture:
ALEXEI A. EFROS (UC Berkeley)
We are (still!) not giving data enough credit!

8:00 PM Reception

8:30 PM Dinner

THURSDAY, JULY 18, 2024 (BADW, SITZUNGSSAAL 1)

9:00 AM **DANIEL CREMERS** (TU Munich)
Back to the roots: Bundle adjustment revisited

9:45 AM **VINCENT SITZMANN** (MIT)
Spatial AI: Learning to model the 3D world for vision and robotics

10:30 AM Coffee Break

11:15 AM **MARC POLLEFEYS** (ETH Zurich)
Spatial AI

12:00 PM **BERNT SCHIELE** (MPI for Informatics)
Inherent interpretability for deep learning in computer vision

12:45 PM Lunch

1:15 PM **PANEL DISCUSSION**
(Daniel Cremers, Vincent Sitzmann, Marc Pollefeys, Bernt Schiele, Ben Poole)