

Dagstuhl Seminar 21192
Approaches and Applications of Inductive Programming AAIP'21
May 9-12, 2021

(virtual, shortened to May 10 and 11) Zoom Link and access has been sent to participants by e-mail.

To accommodate remote participants from different time zones, we have selected a time slot convenient to Europe and America on Monday and to Europe and Asia/Australia on Tuesday.

Schedule (updates might follow)

5 minute highlight talks based on title and abstract submitted to shared documents.

10 May 17:00-19:00 CEST (short talks)

- Welcome and introduction to the seminar (Ute Schmid, Andrew Cropper, Luc de Raedt, Richard Evans)
- Sebastijan Dumancic, Tias Guns (KU Leuven, BE) and Andrew Cropper (University of Oxford, GB): Knowledge Refactoring for Inductive Program Synthesis
- Manuel Garcia-Piqueras (University of Castilla-La Mancha, ES), José Hernández-Orallo: On Conditional Teaching Size and Minimal Curricula
- Thea Behrens, Frank Jäkel (TU Darmstadt, DE): Inductively inferring human problem solving strategies from observed behavior
- Javier Segovia-Aguas (UPF - Barcelona, ES): Generalized Planning as Heuristic Search
- Johannes Rabold (Universität Bamberg, DE): Generating Contrastive Explanations for Inductive Logic Programming Based on a Near Miss Approach
- Pasquale Minervini (University College London, GB): Robust, Data-Efficient, Explainable Deep Learning
- Martin Atzmüller (Universität Osnabrück, DE): A Declarative Framework for Knowledge-Based Explainable Link Analysis
- Gustavo Soares (Microsoft Corporation - Redmond, US): Blue-Pencil: Modeless Program Synthesis
- Maithilee Kunda (Vanderbilt University, US): Individual differences in visuospatial reasoning in neurodiverse and neurotypical populations
- Brainstroming: topics for break-out sessions

10 May 19:00-20:30 CEST: Social meeting

We meet at the Dagstuhl gather space. (Link will be given within the seminar.)

11 May 09:00-11:00 CEST (short talks)

- Claude Sammut (UNSW - Sydney, AU): Learning Episodic Memory Retrieval Procedures Using First-Order Ripple-Down Rules
- Stephen H. Muggleton (Imperial College London, GB): Advances in Meta-Interpretive Learning and Cognitive Artificial Intelligence
- Ute Schmid, Bettina Finzel (Universität Bamberg, DE): Ultra-strong machine learning with explanatory dialogs
- Jaimovitch-López Gonzalo, Cèsar Ferri, José Hernández-Orallo (Technical University of Valencia, ES): IP vs Humans: Learning from Machine Teaching Examples
- Susumu Katayama (University of Miyazaki, JP): Application of Inductive Programming to a Cooperative Game
- Luc De Raedt (KU Leuven, BE): From Statistical Relational to Neurosymbolic AI
- Wang-Zhou Dai (Imperial College London, GB): Abductive Knowledge Induction from Raw Data
- Lun Ai (Imperial College London, GB) et al.: Beneficial and harmful explanatory machine learning
- Tomas Kliegr (University of Economics - Prague, CZ): Analyzing massive biomedical datasets with graph-based rule mining for drug repurposing
- Break-out sessions