

Preface

In the mid-to-late 1980s there was a flurry of papers on various types of explanation-based techniques being applied to learning how to perform actions by observing human performance in a domain. For example, in 1987, Segre demonstrated a system that would observe a human solving a single robot-assembly planning problem, and would then be able to generalize this to a large set of related planning problems. However, as statistical approaches gained in power and popularity, and as the amount of data and datasets available through the web proliferated, machine learning has moved in that direction and away from learning from a single example or using a strong domain model. Recently, however, new efforts have begun to once again look at explanation-based learning. This workshop is an attempt to explore these new efforts, especially in the area of learning planning knowledge.

Topics of interest include the following:

- Learning to plan by observing a human
- Combining observations and advice for learning
- Evaluating one-shot learning
- Representations for planning that are more easily learned
- Use of domain models in learning
- Taking advantage of semantic web (OWL) knowledge in learning
- New approaches to explanation based learning
- Case-based and analogical learning from sparse observations
- Studies of how people teach by, and learn from, demonstration

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