

Udacity AIND Project III - Research Review

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Selected Developments: STRIPS, ADL, PDDL (3.0)

STRIPS (Stanford Research Institute Problem Solver)

STRIPS was designed as the planning component of the software for the Shakey robot project at SRI (Stanford Research Institute). This automated planner was to find some composition of operators that transforms a given initial world model into one that satisfies some particular goal condition.

Representation language used by STRIPS is far more influential than its algorithmic approach, and is close to the “classical” language we call.

ADL (Action Description Language)

ADL is a planning formalism for representing and reasoning about the effects of actions. ADL relaxed restrictions of STRIPS and made it possible to encode more realistic problems. Schemes were explored for compiling ADL into STRIPS.

PDDL (Problem Domain Description Language)

PDDL was introduced as a computer-parsable, standardized syntax to represent planning problems. It has been used as the standard language since 1998.

PDDL was mainly inspired by STRIPS and ADL, and has several extensions. The most recent version is PDDL 3.0, which includes plan constraints and preferences.

References

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