CS3201 Tingrui Hu

Due 09.20/2018 201513025

1. Input: Traffic signs

Model: Recognizing methodology

Output: Meaning of the signs

Type: Modeling

1. Input: Video

Model: Recognizing methodology

Output: Behaviour of the vehicle

Type: Simulation

1. Input: Any two places

Model: Route planning system

Output: Shortest and quickest routes

Type: Optimization

1. Input: A scene that a child crossing road

Model: Reaction mechanism

Output: Avoid the child successfully

Type: Modeling

1. Input: A road

Model: Self-driving-ajust-position system

Output: Keep driving in the middle of the road

Type: Optimization

1. Biology

* Publication:

***An Evolutionary Algorithm that Constructs Recurrent Neural Networks***

* Authors:

Peter J. Angeline, Gregory M. Saunders and Jordan B. Pollack

* Abstract:

A set of standard methods for inducing both the structure and weight values of recurrent neural networks ﬁt an assumed class of architectures to every task.

* Type:

Modeling

1. Engineering

* Publication:

***Multi-objective optimization of an organic Rankine cycle (ORC) for low grade waste heat recovery using evolutionary algorithm***

* Authors:

Jiangfeng Wang, Zhequan Yan, Man Wang, Maoqing Li, Yiping Dai

* Abstract:

Organic Rankine cycle (ORC) can effectively recover low grade waste heat due to its excellent thermodynamic performance. Based on the examinations of the effects of key thermodynamic parameters on the exergy efficiency and overall capital cost, multi-objective optimization of the ORC with R134a as working fluid is conducted to achieve the system optimization design from both thermodynamic and economic aspects

* Type:

Optimization

1. Economics

* Publication:

***Precast production scheduling using multi-objective genetic algorithms***

* Authors:

Chien-HoKo, Shu-Fan Wang

* Abstract:

The goal of production scheduling is to achieve a profitable balance among on-time delivery, short customer lead time, and maximum utilization of resources.

* Type:

Optimization