Title

Analysis Of Sensor Data In Cyber-physical System

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Document Type

Open Access

Degree Program

Electrical & Computer Engineering

Degree Type

Master of Science in Electrical and Computer Engineering (M.S.E.C.E.)

Year Degree Awarded

2013

Month Degree Awarded

September

Keywords

data analysis, cyber physical system, regression, Holt-Winter exponential smoothing

Abstract

Cyber-Physical System (CPS) becomes more and more importance from industrial application (e.g., aircraft control, automation management) to societal challenges (e.g. health caring, environment monitoring). It has traditionally been designed to one specific application domain and to be managed by a single entity, implemented communication between physical world and computational world. However, it still just work within its domain, and not be interoperability. How to make it into scalable? How to make it reusing? These questions become more and more necessary. In this paper, we are trying to developing a common CPS infrastructure, let it be an innovative CPS crossing multiple domains to broad use sensors and actuators. Here, we implement a technique for automatically build a model according to the sensor data in different domains. And based on our approach under continuous situation, it could identify the sensor values right now or estimate next few time step, which we call spatial model or temporal model.

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