

4<sup>th</sup> International Conference on

# BIG DATA ANALYSIS AND DATA MINING

September 07-08, 2017 | Paris, France



## *Kazumi Nakamatsu*

*University of Hyogo, Japan*

### **Process before-after order data verification/prediction systems based on paraconsistent annotated logic program Bf-EVALPSN**

Paraconsistent logic is a well-known formal logic that can deal with contradiction in the framework of a logical system consistently. One of paraconsistent logics called annotated logic was proposed by Prof. Newton da Costa et al. and its logic program was been developed by Prof. V S Subrahmanian et al. later as a tool of dealing with data in knowledge bases. Some years later a kind of paraconsistent annotated logic program has been developed for dealing with non-monotonic reasoning such as default reasoning by Kazumi Nakamatsu. Recently, a paraconsistent annotated logic program called Extended Vector Annotated Logic Program with Strong Negation (EVALPSN) that can deal with conflict resolving, defeasible deontic reasoning, plausible reasoning, etc. has been developed and already been applied to various intelligent controls and safety verification systems such as pipeline valve control, traffic signal control, railway interlocking safety verification, etc. Furthermore, most recently one specific version of EVALPSN called Before-after EVALPSN (Bf-EVALPSN) that can deal with before-after relations between processes (time intervals) has been developed. In this lecture, I introduce how EVALPSN and Bf-EVALPSN deal with contradictory data with a small example and can be applied to intelligent control or safety verification of sensed data.

#### **Biography**

Kazumi Nakamatsu received Doctor of Science degree at Kyushu University, Japan. He is a Professor at University of Hyogo, Japan. He contributed over 150 journal/conference papers and book chapters, and edited/authored 12 books published by prominent publishers. He has chaired various international conferences/workshops, and he has been a program committee member/chair of academic conferences. He has contributed numerous invited lectures at conferences/academic organizations. He received some conference/best paper awards at some international conferences.

[nakamatu@shse.u-hyogo.ac.jp](mailto:nakamatu@shse.u-hyogo.ac.jp)

**Notes:**