



**2016 IEEE World Congress on Computational Intelligence  
(IEEE WCCI 2016)**

**Date: July 25~July 29, 2016**

**Place: Vancouver Convention Centre, Vancouver, Canada**

**Website: <http://www.wcci2016.org/>**

***Proposal***

***FML-based Applications to Social Media Competition @ IEEE WCCI 2016***

Organizer

IEEE Computational Intelligence Society (CIS) Tainan Chapter

Co-Organizers

National University of Tainan, Taiwan

Nottingham Trent University, UK

Osaka Prefecture University, Japan

Chang Jung Christian University, Taiwan

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- **Competition Topic**

“*Who will like your article that you posted on Facebook?*” Please design a Fuzzy Markup Language (FML) system to predict how many likes in your posted article within one to three weeks. Competitors have to describe which variables are involved in the knowledge base (KB) of FML system. Competitors can use an expert-based or a machine learning approach to identify the rule base.
  
- **Competition Method**

Competition will be done before the conference. We will release the Java-based FML tool and call for applications to construct the knowledge base and rule base of FML. They should construct the FML system and write system description document with 2 or 3 pages. The competition will be held on the Internet. The winners can be invited to present the FML system at the IEEE WCCI 2016.
  
- **Competition Criteria**
  - The number of adopted fuzzy variables in the knowledge base of FML system should be at least five. And, the number of linguistic terms of each fuzzy variable should be at least three. With this kind of KB, the authors can start to design their rule base (RB).
  - If the FML system involved in machine learning, the competitor can get more score.
  
- **Competition Evaluation**
  - The organizer will post some articles related to computational intelligence to Facebook. The competitors can share these articles to their personal Facebook. Then, they can design their knowledge base and rule base of FML system to infer how many “likes” on the post.
  
- **Fuzzy Markup Language (FML) Introduction and Implementation**

For more details about FML, please download the FML user guide from

  - <http://kws.nutn.edu.tw/fmldoc/> or
  - <http://www.di.unisa.it/dottorandi/avitiello/FML/A%20primer%20in%20FML.pdf>
  
- **Installation of VisualFMLTool**

VisualFMLTool can be executed on platforms containing the Java Runtime Environment. The Java Software Development Kit, including JRE, compiler and many other tools can be found at <http://java.sun.com/j2se/>. To install VisualFMLTool is needed to download the visualFMLTool and user guide from these two web sites

  - <http://kws.nutn.edu.tw/fml/> or
  - <http://www.di.unisa.it/dottorandi/avitiello/FML/VisualFMLTool-0.1.1.zip>

and to extract it. Then it is only needed to click the file VisualFMLTool.bat included in the zip to execute the tool.

- **Reference**

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