2018 Summer School on Fuzzy Cognitive Maps

Summer School website: www.fcm-summerschool.teiste.gr
May 21-25, 2018 (5 days)

Organized and Coordinated by Assoc. Prof. Elpiniki Papageorgiou
Dep. of Computer Engineering, TEI of Sterea Ellada, Lamia, Greece
epapageorgiou@teiste.gr, epapageorg@cs.uth.gr
www.epapageorgiou.com

This five-day Summer School deals with the principles, assumptions, models, learning algorithms, convergence issues, strengths, limitations, applications of Fuzzy Cognitive Maps (FCM) and new web-based and open-source software tools for them. All computer experiments and hands on will be based on the web-based tool and other open-source codes for FCM inference and learning developed and supervised by Organizer (in R and GitHub).

Summer School Scope

☐ Is dedicated to providing participants on deep insights in *fundamentals, inference approaches, modeling methods, learning algorithms, optimization, prediction and decision making issues* for FCMs

☐ Hands on exercises and real case studies using codes developed by organizers and web-based, new **open-source tools** for modeling, inference and decision making

☐ Participants will bring their own problems from different application domains and through our expertise we will provide solutions and suggestions for papers.

☐ Web-based software tool, called FCM wizard, will be fully accessible by participants which will be able to experimented with this, investigate and perform their real case problems. (see www.fcmwizard.com)

Registration (450 euro)

Registration includes attendance to the summer school, materials, software tools, exercises, coffee breaks, lunches and a social activity. Registration fees also include a full version of web-based tool FCM WIZARD, which will be used for the practical computer exercises, and for any real problems that attendees want to solve and reach decisions.

☐ For **students** (including PhD students): 450 EUR
☐ For other **academics** (including postdocs): 550 EUR
☐ For **professionals**: 600 EUR

Important Dates

- Application submission opening: December 15th, 2017
- Deadline for Application: April 30th, 2018
- Early registration deadline: April 30th, 2018

Computer Exercises

The computer practice component of the Summer School has a number of very useful hands on real case studies. Hands on training includes: · FCM construction from experts and stakeholders · FCM construction from historical data · Inference and Scenario analysis · Learning · Optimization · Convergence · Prediction · Classification · Clustering · Decision Support (medical, environmental, business, management etc)

Target audience

The ideal number of participants is about 50. The summer school will host: a) young researchers who wish to achieve a thesis on the subject or to carry on a personal work which uses FCM or to in-depth their knowledge in this discipline in order to complete their training, and b) academics and scientists from research community that have an interest in using FCMs, either as a theoretical framework or as a methodology and tool for applied research, engineering, industrial applications, environmental management, medical decision support, computer science etc.

Language

The official language of the School is English. Unfortunately, we cannot provide any simultaneous translation.

How to Apply

The summer school invites applications from academics, new generation researchers, applied researchers to use the FCM methodology, doctoral students and postdocs, professionals interested in learning about Fuzzy Cognitive Maps in modelling, prediction, classification and decision support. You need not yet have any experience in Fuzzy Cognitive Maps. Also, the Summer School will partly cover certain soft computing methods such as neural networks, fuzzy systems or evolutionary computation, applied to data mining and decision support tasks.

Students can be from any area of research. Advanced masters level students can also apply.

Deadline for applications is April 30th, 2018.

Coordinator: Prof. Elpiniki Papageorgiou, TEI of Sterea Ellada, Lamia, Greece

Organized by University of Thessaly, Volos, Greece

Structure: 32h course; 5 days; approximately 6h/day

Contact Information

Assoc. Prof. Elpiniki I. Papageorgiou
Department of Computer Engineering
Technological Educational Institute of Sterea Ellada
3o Km Old National Road Lamia-Athens, TK 35100, Lamia, Greece
Phone : (+30)22310 60255 (office)
web : http://www.epapageorgiou.com
e-mail: epapageorgiou@teiste.gr, e.i.papageorgiou75@gmail.com