

Summary Report
Lecture by IEEE CIS Distinguished Lecturer
Prof. Kalyanmoy Deb
Genoa (Italy) - Jun 21, 2019

Lecture title: Customized Evolutionary Optimization for Practical Problem Solving

Abstract: Practitioners are often reluctant in using a formal optimization method for routine applications, mainly due to the general perception of requiring a large computational time and ending up with a specialized and often "brittle" solution. Optimization methods have come a long way and are made flexible to handle various practicalities including reduction of solution time, handle large dimensions, search for robust and reliable solutions, and discover useful knowledge understanding intricacies of the problem. In this talk, we shall emphasize the importance of customized optimization algorithms in handling various practicalities. A few case studies from industries involving an extreme scale (billion-dimensional) problem and computationally expensive (consuming two days per evaluation) will be presented to demonstrate the usefulness of computational intelligence methods.

Date: June 21, 2019 - time 2:30 pm

Venue: Conference Room DIBRIS - Dept of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genoa, Via Dodecaneso 35, 16146 Genoa (Italy)

Speaker's name: Prof. Kalyanmoy Deb, Koenig Endowed Chair Professor, Michigan State University, East Lansing, MI 48864, USA

Inviting chapter: IEEE Italy Section Computational Intelligence Society Chapter

DL talk procedure: The CIS Distinguished Lecturer Prof. Kalyanmoy Deb was announced on 3/25/19 and on 6/16/2019 on IEEE eNotice and other mailing lists. Prof. Deb arrived in Genoa in the evening of 6/20/2019. On the morning of 6/21/2019 he had a meeting with the researches on Computational Intelligence of the University of Genoa aimed at finding possible topics for research collaborations. At 2:30 pm of the same day Prof. Deb presented his IEEE CIS Distinguished Lecture. The attendance was limited to 10 professors and PhD students, since the lessons were finished at the end of May and June and July was a period of exams and conferences. The lecture was introduced by Prof. Francesco Masulli, Chair of the IEEE Italy Section Computational Intelligence Society Chapter, who acknowledged the IEEE CIS Distinguished Lecture Program. The presentation lasted about one hour, attracting great interest from the audience. After the presentation he received four questions from the audience and then he had some informal discussions with the participants until 4:00 pm aimed at stimulating possible collaborations.



Introduction to the lecture



Presentation by Prof. Deb



Some of the participants during the question time