Building the Fuzzy Regression Model for Non-Fuzzy, Type1 Fuzzy, Type2 Fuzzy Data and Its Applications to Engineering & Management of Finance

26th Dec 2016 to 30th Dec 2016, Anna University, Chennai, INDIA.

Overview

Since Golton's model, statistical regression analysis is widely used in various research and analysis of business data. Today, fuzzy data are studied in business field. Especially, the SMC paper in 1982, it was studied theoretically as well as in application. This lecture will explain the basic background of fuzzy systems and extend its concept to regression modeling. In the discussion we are working on non-fuzzy data, type-1 fuzzy data and type-2 fuzzy data. The lecture provides the way to build a new model.

Course participants will learn the topics below through lectures, simulation assignments and tutorials.

- Exploring the fundamentals of Fuzzy Sets and System
- Discussing a statistical model of regression analysis.
- Type-1 fuzzy data analysis.
- Type 2 fuzzy data analysis.
- Fuzzy regression based support vector machine
- Fuzzy data applications to engineering
- Regression model for Fuzzy data in Management of Finance

<table>
<thead>
<tr>
<th>Dates for the Course</th>
<th>26th Dec 2016 to 30th Dec 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host Institute</td>
<td>Anna University, Chennai, INDIA.</td>
</tr>
<tr>
<td>No.of credits</td>
<td>1</td>
</tr>
<tr>
<td>Maximum No. of Participants</td>
<td>70</td>
</tr>
<tr>
<td>You Should Attend If...</td>
<td>You are an engineer and researchers from soft computing and statistical regression analysis or faculty from academia, technical institutions, research scientist from industry or a government research organizations interested in Fuzzy data applications. You are a student or faculty from an academic institution interested in learning how to do research using Fuzzy systems and its applications. Students can be at all levels (B.E/ BTech/M.E/ MTech /MSc/PhD).</td>
</tr>
<tr>
<td>Course Registration Fees</td>
<td>The participation fees for taking the course is as follows: Industry/ Research Organizations - Rs. 5,000/- Academic Institutions: Faculty - Rs.3,000/- Academic Institutions: Students/Research Scholar - Rs.2,000/- Participants from abroad: $500 The above fee is towards participation in the course, the course material, computer use for tutorials and assignments, and laboratory equipment, internet usage charges. Mode of payment: Demand draft in favour of “The Director CTDT, Anna University” payable at Chennai.</td>
</tr>
<tr>
<td>Accommodation</td>
<td>The participants will be provided with hostel accommodation, depending on availability, on payment basis</td>
</tr>
</tbody>
</table>
The Faculty

Prof. Junzo Watada is currently a Professor Emeritus at Waseda University, Japan as well as a Professor, Computer and Information Sciences Department, Universiti Teknologi PETRONAS, Malaysia. He was tenured Professor of Knowledge Engineering, Soft Computing and Management Engineering at the Graduate School of Information, Production & Systems, Waseda University till 31st March 2016, after the tenured Professor of Human Informatics and Knowledge Engineering, at the School of Industrial Engineering, the Osaka Institute of Technology, Japan. Also Dr. Watada was the tenured Faculty Lecturer, Associate Professor on Management Information Systems at Faculty of Business Administration, Ryukoku University at Kyoto. His research interest includes collaborative innovation of management of technology and engineering. Recently he works on big data processing, financial engineering and intelligent decision technologies as well as soft computing methodologies, automata theory, text and web mining and decision support systems etc.. Especially his academic interest includes metaheuristics methodology and human tracking. Dr. Watada published three monograms, nine edited books and about 66 book chapters as well as 210 journal papers and 438 international proceeding papers.

Prof. Junzo Watada, made significant contribution to Academics, and serves as the executive chair of International Society of Management Engineers (ISME), also as the President of Bio-Medical Fuzzy Systems Association (2001-2003), and the Vice President of Japan Society for Fuzzy Theory and Systems for two years (1993-1995). He was a board committee member of Japan Society for Fuzzy Theory and Systems, several international and domestic societies, and an editorial board member for international and Japanese journals. He is a recipient of most significant, contribution awards in Fuzzy systems.

Dr. M. R. Sumalatha is an Associate Professor at Department of Information Technology and Deputy Director at Centre for Technology Development and Transfer, Anna University. She has been selected as one of the leading achievers around the globe from New Providence, USA (2010) and for Dr. APJ Abdul Kalam Award for Teaching Excellence in the year 2015.

She has many research publications to her credit and her area of research interest includes Distributed Systems, Cloud Computing, Big Data Analytics, Social Platforms, Data Security and Privacy. She has initiated and promoted many successful programmes in distributed systems, data analytics and intelligent systems.

Course Co-ordinator

Dr. M. R. Sumalatha
Associate Professor
Department of Information Technology
MIT Campus, Anna University
Chennai - 600 044

Phone: 044-2251 7930 / 2235 7925
Mobile: 9710814484
E-mail: sumalatha@annauniv.edu
gianmit2015@gmail.com

http://www.annauniv.edu/gian/course.html
Global Initiative of Academics Networks (GIAN)
166020K03 : Building the Fuzzy Regression Model for Non-Fuzzy, Type1 Fuzzy, Type2 Fuzzy Data and Its Applications to Engineering & Management of Finance
26th Dec to 30th Dec 2016,
Anna University, Chennai
REGISTRATION FORM

Name (Block Letters) : .........................................................................................................................................................
Age and Date of Birth : ...........................................................................................................................................................
Gender :  [ ] Male  [ ] Female  [ ] Transgender
Educational qualification : ............................................................................................................................................................
Designation : ..............................................................................................................................................................................
Experience : ................................................................................................................................................................................
Institution : ................................................................................................................................................................................
Address : ....................................................................................................................................................................................
..............................................................................................................................................................................................
Mobile : ......................................................................................................................................................................................
E-mail : .......................................................................................................................................................................................
GIAN Application ID : .............................................................................................................................................................
(Application Id Generated during One time registration at GIAN portal of IIT Kharagpur)
Course Fee :  [ ] Industry/Research Organizations - Rs. 5,000/-
               [ ] Academic Institutions: Faculty - Rs. 3,000/-
               [ ] Academic Institutions: Students/Research Scholar - Rs. 2,000/-
               [ ] Participants from abroad: $500

Payment should be made through:
Demand Draft, in favour of “The Director CTDT, Anna University” payable at Chennai.
DD no: ..........................................................................................................., Date: .................................................................
Amount: ............................................................................................... Bank: ......................................................................................

Date: .................... Signature of Candidate

APPROVAL FROM INSTITUTION

Date: .................... Seal and Signature of the Principal/
                       Head of the Department/Division

Send through post to the course coordinator: Dr. M. R. Sumalatha, Deputy Director & Associate
Professor, Centre for Technology Development and Transfer (CTDT), Anna University, Guindy, Chennai - 600 025. Please visit www.gian.iitkgp.ac.in and www.annauniv.edu/gian/ for more details.