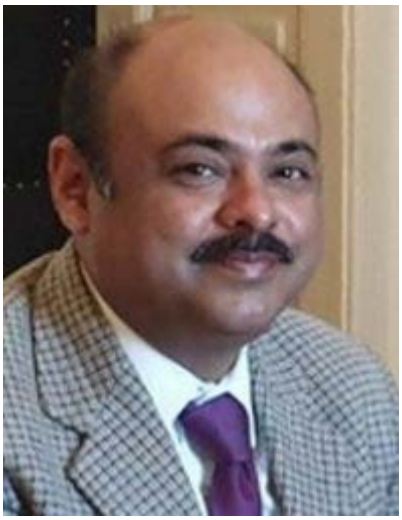
Stability of Interpersonal relationship among dyads with delayed emotion: System Theory Approach



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Abstract:

Interpersonal relationships with a bit of romance between the dyads are typically considered a fundamental component of a balanced happy life in western societies. When people are asked what they believe necessary for happiness they usually give priority to ‘love’ or to ‘a close relation. It is hard to think of another aspect of human life involving so many cultural, sociological, psychological or economic issues. Whereas the initial stage of interpersonal relationships seems to be controlled by chemical processes, the issue of maintaining a healthy relationship may rather belong in the realm of rational decisions. People usually engage in long-term relationships –typically marriage– only after due consideration. However, dyadic interpersonal relationships or interactions are complicated and difficult to predict. One of the possibilities of making some predictions is to use mathematical modelling or statistical approach. In this talk a mathematical modeling will be highlighted that can capture reactions of individuals to stimuli that are assumed to be instantaneous, both in discrete and continuous in time. During the talk many other complex issues for modelling will be highlighted from the system identification and control perspective.

Bio Data:

Dr. Rajeeb Dey is currently working as Assistant Professor-I in the department of Electrical Engineering, National Institute of Technology Silchar, Assam, India. Prior to joining NIT Silchar he was Associate Professor in Sikkim Manipal Institute of Technology, Sikkim till 2014. He has obtained his B. Tech (Electrical Engineering) in 2001 from NERIST, Itanagar, M.Tech in Control Engineering from IIT Kharagpur in 2007 and PhD in Control Engg from Jadavpur University in 2012. He was a post-doctorate fellow in the department of Automatic control, Centre of research and advanced studies (CINVESTAV) at Mexico City during 2015-2016. Dr. Dey has more than 20 years of teaching and around 12 years of research experience

in the area of control and applied mathematics. He is a recipient of TWAS (The world Academy of Science) Italy post-doc fellowship in 2015. During 2018 - 2020 he was visiting faculty under ERASMUS+ program of European Union to Aurel Vlaicu University of Arad, Romania. In 2020 August he has been appointed as a visiting faculty by Aurel Valicu University, Arad, Romania. He has guided 04 PhD students so far and 02 are currently registered under him. He has handled 03 sponsored projects from AICTE, MoE and SERB in the area of automation and control, executed 04 GIAN (Global Initiative for Academic Networking) program by the MoE, GoI during 2016-2019. He is a senior member of IEEE since 2013, Fellow IE(I), he is currently Secretary of ACDOS (Advanced Control and Dynamic Optimization Society) an Indian National Member Organisation of IFAC (International Federation of Automatic Control), Honorary Secretary of The Institution of Engineers (India) Silchar Local Centre. In the past he has served as Executive member of ACDOS for almost 10 years since 2014, founding Executive Committee Member of IEEE Joint CMS Kolkata Chapter, Executive committee member (Electrical) of IEI Silchar Local Centre. Dr. Dey has published several books, research monographs, journal articles, conference papers and Indian patents with reputed international publishers (Springer, Elsevier, Wiley, Taylor and Francis, IEEE etc). His research interest are Time-delay control, Control applications in Biomedical Engineering, Machine learning and data science in control engineering and Psychological modelling and dynamics