#### DR. SREERAMA KUMAR R

Professor, Department of Electrical and Computer Engineering, Kimg Abdulaziz University

### **Education**

Degree	Field of Study	Institution	Year
Ph.D.	Electric Power Systems	Indian Institute of Science, Bangalore	1992
M.Tech.	Electrical Engineering	Indian Institute of Technology, Madras	1986
B.Tech.	Electrical Engineering	University of Calicut	1984

## **Academic Experience**

From To	Institution	Rank	Title	Full or Part Time
1985 1991	National Institute of Technology Calicut	Lecturer		Full Time
1991 1997	National Institute of Technology Calicut	Sr. Lecturer		Full Time
1997 2005	National Institute of Technology Calicut	Asst. Professor		Full Time
2005 2010	National Institute of Technology Calicut	Professor		Full Time
2011 2012	National Institute of Technology Calicut	Professor	Dept. Head	Full Time
2012 2013	King Abdulaziz University Jeddah	Professor	Chair Professor	Full Time
2014 Date	King Abdulaziz University Jeddah	Professor		Full Time

**Non-Academic Experience** (*Including Consultations*)

# Funded Research Projects and Patents From The Last Five Years

2012-13 :Chair Professor :Saudi Electricity Company Chair (Demand Side Management and Energy Efficiency)

# Certifications and Professional Registrations

# Current Membership in Professional Societies and Organizations

	Society/Organization	Rank	Since
i.	IEEE	Senior Member IEEE	2000
ii.	institute of Engineers (India)	Fellow	2001
iii.	Indian Society for Technical Education(ISTE)	Life Member	1992
iv.	Energy Conservation Society	Life Member	1995

### **Major Honors and Awards**

- National Award for the Best Engineering College Teacher of Kerala State—2008 given in recognition of his outstanding contribution to the Academic Community and the Students (Given every year to one engineering teacher from the various nominations received from the Directors/Principals of various Engineering Institutes in Kerala)
- National Award for Promising Engineering Teacher 2003 for the Creative Work Done in Technical Education Instituted by the Indian Society for Technical Education (Given every year to one engineering teacher from the various nominations received from the Directors/Principals of various Engineering Institutes in India)
- An International Journal Publication has secured 8<sup>th</sup> Position as per Science Direct Survey: Top 25 Hottest Articles in Engineering Applications of Artificial Intelligence during the period from July to September 2010:
- An International Journal Publication has secured **11**<sup>th</sup> **Position as per Science Direct Survey:** Top 25 Hottest Articles in Engineering Applications of Artificial Intelligence during the period from July to September 2010:
- Honorary Appointment to the **Research Board of Advisors 2000 of the American Biographical Institute**, 2000.

#### **Institutional and Professional Services**

- Expert Member National Board of Accreditation of All India Council for Technical Education, Govt. of India.
- **Subject Expert in the Staff-Selection Committee** of National Institute of Technology, Trichi (August 2005-2008) and National Institute of Technology, Surathkal (August 2007-2010).
- **Member, UG Board of Studies** of the Department of Electrical Engineering, NIT Surathkal (June 2003-2004).
- **Member, Board of Studies** of the Department of Electrical Engineering, Anna University –Coimbatore (August 2007-2010), Department of Electrical Engineering, PSG College of Engineering & Technology Coimbatore (August 2009-2012).
- **Member of the Institute Management Committee** of the Government ITI for Women, Kozhikode, Govt. of Kerala since 2008-2012)

#### King Abdulaziz University Jeddah

- Chair Professor (Saudi Electricity Company Chair on Demand Side Management and Energy Efficiency
- Actively Involved in the Establishment and Development of Emergency and Disaster Center
- Actively Involved in ABET Accreditation Activities of the ECE Department

#### **National Institute of Technology Sikkim**

• First **Coordinator of the new Institute:** involved as the key person in the establishment of the basic facilities to the learning ambience in the Institute (2009-2010), and also moulding the first and second batch of students as the models of the following batches

### **National Institute of Technology Calicut**

- Professor & Head of the Department of Electrical Engineering (2010-12)
- Project Manager- Decision Support Systems Implementation Unit of NIT Calicut (2004-2011) (Complete NITC Office Automation Mission)

- PG Course Coordinator of the Department of Electrical Engineering (1998-2006)
- PG Course Coordinator of M.Tech. Power Systems (2006-2011)
- Chairman of M.Tech. Curriculum Committee of EED.
- Member in the B.Tech. Curriculum Committee of EED.
- **IEEE** (**USA**): Vice-Chairman/Secretary of IEEE (Industry Applications and Industrial Engineering and Power Electronics Society Joint Chapter)—Kerala Section (2004 -2012), Student Branch Counsellor NIT Calicut (2008-2010)
- **Institution of Engineers (India)** Chairman of *Calicut Centre (2004-06)*, Hon.Secretary-Cum-Treasurer (Oct.2001-Oct.2003)
- Indian Society for Technical Education (ISTE): Chairman of ISTE NIT Calicut Chapter (2003-2008), Hon.Secretary-Cum-Treasurer (Nov.1999-Nov.2003)
- Energy Conservation Society (ECS): Joint Secretary (1995-1999), Secretary-Calicut Chapter (1995-97)
- Reviewer of the following journals

IEEE Transactions of Artificial Neural Networks

IEEE Computational Intelligence Magazine

International Journal of Electric Power Components and Systems

International Journal of European Transactions on Electrical Power

International journal of AMSE (France)

Iranian Journal of Electrical and Computer Engineering (IJECE)

Engineers Australia Technical Journal

### **Principal Publications/Presentations from the Past Five Years**

- 1. Jolly K. G., Sreerama Kumar R., Vijayakumar R., "Artificial Neural Networks for Learning and Decision Making in Multi-Agent Robot Soccer Systems", Int. Jl. for Computer Research, Vol. 17, pp. 75-96, 2009.
- 2. K.G. Jolly, R.Sreerama Kumar, R Vijayakumar, "An Artificial Neural Network Based Dynamic Controller for a Robot in a Multi-agent System", International Journal of Neurocomputing, 73, pp. 283-294, 2009.
- 3. K. G. Jolly, R. Sreerama Kumar, R. Vijayakumar, "A Bezier Curve Based Path Planning in a Multi-Agent Robot Soccer System Without Violating the Acceleration Limits", Robotics and Autonomous Systems 57(1), pp. 23-33, 2009.
- 4. K. G. Jolly, R. Sreerama Kumar, R. Vijayakumar: Intelligent task planning and action selection of a mobile robot in a multi-agent system through a fuzzy neural network approach. Engineering. Applications of Artificial Intelligence 23(6), pp. 923-933, 2010.
- 5. Sunitha R, Sreerama Kumar R, Abraham T Mathew, "A Composite Security Index for On-line Steady-state Security Evaluation", Int. Journal of Electric Power Components and Systems, Volume 39, Number 1, pp. 1-14, January 2011.
- 6. Asokan O, Sreerama Kumar R, "ANN Based Relay for Voltage Collapse Mitigation in EHV Transmission Systems", International Review on Modelling and Simulations", Vol.4, No.5, pp.2602-2607, Oct. 2011.
- 7. Balachandran D P, Sreerama Kumar R,"Volt-Second Balance Method for Mitigation of Inrush Current in Single Phase Transformers", International Journal of Power System Operation and Energy Management, ISSN (PRINT): 14-18, Vol-I Issue-3, 2012.
- 8. Vinod Pottakulath, Elizabeth P Cherian, Sreerama Kumar. R, "Determination of Reduced Order Model for Torsional Interaction Investigations using Selective Modal Analysis, **Part I**: Initial Approach", International Journal of Electrical Power and Energy Systems", Vol. 44, Issue 1, pp. 482-487, 2013.

- 9. Vinod Pottakulath, Elizabeth P Cherian, Sreerama Kumar. R, "Determination of Reduced Order Model for Torsional Interaction Investigations using Selective Modal Analysis, **Part II**: Application to Practical Power Systems", Part II in Vol/Issue 44/1, International Journal of Electrical Power and Energy Systems Vol. 44, Issue 1, pp. 454-460, 2013.
- 10. Ismayil C, Sreerama Kumar R, Sindhu T.K, "Comparative Analysis of Genetic Algorithm and Fuzzy Logic based Automatic Generation Control of Multi Area Power Systems", *International Review* on Modeling and Simulation, Praize Worthy Publications, Italy, Vol.6, No.1, pp.136-144, Feb.2013.
- 11. Sunitha R, Sreerama Kumar R, Abraham T Mathew, Veeresh P Kosaraju, "Cluster Computing Environment for On line Static Security Assessment of Large Power Systems", ACEEE Int. Jl. on Electrical and Power Engineering, Vol. 4, No. 2, Aug 2013
- 12. Ibrahim M Jomoah, Sreerama Kumar R, Abdul Aziz U M, Nabil Yassien Abdel-Shafi, Ramzy R Obaid, "Ethernet TCP/IP based Building Energy Management System in a University Campus in Saudi Arabia", International Journal of Energy and Environment, Volume 4, Issue 6, pp.1033-1040, 2013.
- 13. Sunitha R, Sreerama Kumar R, Abraham T. Mathew, "On-line Static Security Assessment Module Using Artificial Neural Networks", IEEE Transactions on Power Systems, Vol.28, No.4, pp. 4328-1435, Nov. 2013.
- 14. Sunitha R, Sreerama Kumar R, Abraham T Mathew, "A Multi-Objective Contingency Constrained Optimal Power Flow Based on Composite Security Index Using Genetic Algorithm and Newton Method", International Review On Modelling and Simulation, Vol. 6, No. 5, Dec. 2013
- 15. Sreerama Kumar R, Ibrahim M Jomoah, Abdullah O Bafail, "Optimal Placement of Unified Power Flow Controller for Minimization of Power Transmission Line Losses", International Journal of Computer Theory and Engineering, Vol. 6, No. 5, pp. 371-381, October 2014.
- 16. International Book Chapter Contribution: Jolly K. G., Sreerama Kumar R., Vijayakumar R."Artificial Neural Networks For Learning and Decision Making in Multi-Agent Robot Soccer Systems", Robot Vision: Strategies, Algorithms and Motion Planning: Edited by: Daiki ItÃ′, NOVA Science Publishers, Inc (USA), 400 Oser Avenue, Suite 1600, Hauppauge, NY 11788, ISBN: 978-1-60692-091-6, 2009.
- 17. International Book Chapter Contribution: K. G. Jolly, R. Sreerama Kumar, R. Vijayakumar, "A Modular Artificial Neural Network Based Decision Making in a Multi-Agent Robot Soccer System" Published as Chapter 3 in the Book entitled "Agent Based Computing" Edited by Duarte Bouca and Amaro Gafagnao, published by NOVA Science. Pub. Inc (USA), 400 Oser Avenue, Suite 1600, Hauppauge, NY 11788, ISBN 978-1-60876-684-0, pp. 89-107, 2011.

## **Recent Professional Development Activities** (Workshops, Trainings etc.)

- 1. Coordinated the Two Weeks Faculty Development Programme and Given lectures on "FACTS and Custom Power Controllers for Quality Enhancement of Deregulated Power Systems", May 2009, NIT Calicut.
- 2. Coordinated the National Workshop and Given presentations on "New Frontiers in DSM: Techniques and Applications", King Abdulaziz University, Jeddah, Nov.2012.
- 3. Participated in the Saudi Electricity Forum and Exhibition Conference (SEEFE), Riyadh, Nov. 2012, and Delivered a key-note speech entitled "Mitigation of Power Quality Problems in a Medium Voltage Steel Industry Using Custom Power Applications"
- 4. Participated in the 2nd International Conference on Engineering and Applied Science (ICEAS 2013), Tokyo, Japan, 15-17 March 2013, Chaired a technical session and Presented a paper entitled "Multilayer Feed-forward and Radial Basis Function Artificial Neural Networks for Spot Electricity Pricing in Deregulated Power Systems".

- 5. Participated in the 4th IEEE-IEE Joint International Conference on Power Engineering, POWERENG 2013, Istanbul, Turkey, 13-17 May 2013, and presented a paper entitled "Energy Management in the Buildings of a University Campus in Saudi Arabia—A Case Study".
- 6. Participated in the 5<sup>th</sup> International Conference on Modeling and Simulation, Barcelona, Spain, February 2014 and Presented a paper entitled "Optimal Placement of Unified Power Flow Controller for Minimization of Power Transmission Line Losses".
- 7. Given a Seminar on "Fuzzy Mathematics and Research in Electrical Engineering" in the Center of Excellence in Intelligent Engineering Systems, King Abdulaziz University, Jeddah, 20 October 2014
- 8. Given a Seminar on "Art of Writing Research Paper" in the Department of Industrial Engineering, 17 Nov. 2014