Dr. S. Meyyappan
Assistant Professor, Department of Instrumentation Engineering

Mobile Phone No.: 9865682065

E-Mail ID   : meys.narayan@gmail.com, meys.mit@annauniv.edu

Address   : No 12, Raja Garden, Varghese Avenue,
Maruthu Pandi Street, Chitlapakkam, Chennai 600064

Present Position

Assistant Professor, Department of Instrumentation Engineering, Madras Institute of Technology, Anna University, Chennai from 21-02-2018 to till date.

Previous Positions

➢ Assistant Professor in the Department of Electronics and Instrumentation Engineering, Faculty of Engineering and Technology, Annamalai University, Annamalai University, Annamalai Nagar from 01-08-2010 t0 20-02-2018.

➢ Lecturer (Senior Scale) in the Department of Electronics and Instrumentation Engineering, Faculty of Engineering and Technology, Annamalai University, Annamalai Nagar from 09-07-2008 to 31-07-2010.

➢ Lecturer in the Department of Electronics and Instrumentation Engineering, Faculty of Engineering and Technology, Annamalai University, Annamalai Nagar from 09-07-2003 to 08-07-2008.

Degree

❖ M.E. in Process Control and Instrumentation Engineering, Annamalai University (2005 - 2008).

❖ B.E. in Electronics and Instrumentation Engineering , Annamalai University (1998 - 2002).

Research Degree

❖ Ph.D. in Process Control in Instrumentation Engineering, Annamalai University (2012 - 2016).
Title: *VLSI SOLUTIONS FOR SELF HEALING DIGITAL SYSTEMS*

.

Area of Specialisation

➢ Fault Tolerant Digital Systems Design

➢ Embedded Control

Research Guidance

Number of Ph.D Scholars Being Guided   01
Number of M.E./ M.Tech. Projects Guided   12

Papers Published in Journals

Research Papers Published in International Journals   12

1. Meyyappan, S., and V. Alamelumangai. (2013). FPGA Implementation of a Self Healing Strategy for Interconnect Faults in Digital Measurement Circuits. *International Journal of Scientific & Engineering Research*, 4(12), 1013 -1017.

2. Meyyappan, S., and V. Alamelumangai. (2015). FPGA based Self Healing Solution for Fault Tolerant Digital Circuits. Australian Journal of Basic and Applies Sciences 9(7), 251 - 257.

3. Meyyappan, S., and V. Alamelumangai. (2015). Vlsi Based Self Healing Solution for Fault Tolerant Digital Circuits.*International Journal of Development and Research,* 5(11),5947 - 5951.

4. Kalloor, J., & Meyyappan, S. (2015). VHDL Realization of Hybrid Control Strategy for a Nonlinear System. *International Journal of Computer Applications*, *113*(12), 17 - 21.

5. Meyyappan S., & V. Alamelumangai. (2017). Black Box Model based Self Healing Solution for Stuck at Faults in Digital Circuits. *International Journal of Electrical and Computer Engineering*, *7*(5), 2451 - 2458.

6. Meyyappan, S., and V. Alamelumangai. (2017). Black box model-based self healing solution for stuck-at-faults in combinational circuits. *International Review of Applied Sciences and Engineering* 8(2), 117-126.

7. Meyyappan, S., and Kalloor, J.(2017). A Low Area Overhead Fault Tolerant Strategy for Multiple Stuck-At-Faults in Digital Circuits. *International Journal of Applied Engineering Research* 12(17), 6369-6376.

8. Kalloor, J., & Meyyappan, S. & B. Baskaran. (2018). A Low Power Fault Tolerant Architecture for Digital Systems. *International Journal of Pure and Applied Mathematics* 119(10), 1087-1095.

9. Kalloor, J., & Meyyappan, S. & B. Baskaran. (2018). A Low Power Fault Tolerant Strategy for Intermittent Faults in Digital Systems. *Journal of Advanced Research in Dynamical & Control Systems.*10(13), 1860-1868.

10. A. Ganesh Ram, M. Vijayakarthick, S. Meyyappan, N. Vinoth and S. Sathishbabu. (2020). Bifurcation and Chaos in Current Programmed Positive Output Luo_Converter. *European Journal of Molecular & Clinical Medicine.* 7(2), 5153-5164.

11. N. Vinoth, M.Vijayakarthick, A.GaneshRam, S. Meyyappan, S. Sathishbabu. (2020). Thresholding of skin melanoma images based on kapur's Entropy with Harmony Search Algorithm. *European Journal of Molecular & Clinical Medicine.* 7(11), pp.716-726.

12. Meyyappan S., & C. Meenakshi. (2020). Fuzzy Logic based Enhanced Word Sense Identification through Relation Construction. *Solid State Technology.* 63(6), 14627 - 14635.

Papers Presented in Programmes

Research Papers Presented in International Programmes   6
Research Papers Presented in National Programmes   4

1. *A Realistic Approach in Engineering Education Teaching Methods and Industry partnership*, International Conference on Competency based Teacher Education, 9th and 10th of February, 2010, Tiruchengode, India.

2. *Design and Implementation of Multi Model Reference based Self Tuning Fuzzy Adaptive PI Controller for a Spherical Tank System*, International conference on Intelligent Computing and Sustainable System (ICICSS 2018), 20th and 21st September 2018, Coimbatore, India.

3. *Design of Low Area Overhead Self Healing Digital Systems Design*, International Conference on Information, Embedded and Communication Systems (ICIECS 2019), 22nd March 2019, Chennai, India.

4. *A Low Power Fault Tolerant Strategy for Transient Faults In Digital Systems*, International Conference on Advances in Computing and Information Technology (ICACIT '19), 24th and 25th September 2019, Annamalai Nagar, India.

5. *Bifurcation and Chaos in Current Programmed Positive Output Luo_Converter*, International level conference on Recent Trends in Engineering and Scientific Technology (ICTEST-2020), 21st March, 2020.

6. *Automatic Number Plate Recognition of Helmetless Motorcyclists using Computer Vision*, International Conference on Future Prospects of Biotechnology and Biomedical Applications, 18th December 2020, Coimbatore, India

7. *Identification of Word Sense using Neural Networks for Intelligent Information Systems*, National Conference on Computer Applications (NaCoCA 2012), 27th February 2012, Kangayam, Tamilnadu, India.

8. *VHDL Realization of Hybrid Control Strategy for a Nonlinear System*, National Conference on Emerging Trends in Electronics, Instrumentation, Automation and Control (ETEIAC ' 14), 19th March 2014, Coimbatore, India.

9. *A low area overhead Self Healing Strategy for Digital Circuits*, National Conference on Trends in Instrumentation and Automation (NCTIA-2015), 10th April 2015, Vellammal Engineering College, Chennai, India.

10. *Exploration of Non-Volatile FPGA using MRAM*, State Level Seminar on Recent Trends in Computer science and Applications, 15th February 2017, Chidambaram, India.

Book Chapter Publications

1. N. Vinoth, A. Ganesh Ram, M. Vijayakarthick, S. Meyyappan, *Automatic Mask Detection and Social Distance Alerting Based on a Deep-Learning Computer Vision Algorithm, Computational Modelling and Imaging for SARS-CoV-2 and COVID-19*, Taylor & Francis, CRC Press, Chapter 5, pp.5- 21, 2021.

2. M. Vijayakarthick, E. Sivaraman, S. Meyyappan, N. Vinoth, *ANFIS Algorithm based Modeling and Forecasting of the COVID-19 Epidemic: A Case Study in Tamil Nadu, India*, Taylor & Francis, CRC Press, Chapter 7, pp.111- 123, 2021.

3. Ganesh Ram A and S. Meyyappan, *Real-Time Implementation of Multi-model Reference-Based Fuzzy Adaptive PI Controller for a Liquid-Level Process*, Proceedings of International Conference on Intelligent Computing, Information and Control Systems, Advances in Intelligent Systems and Computing, Springer Nature Singapore Pvt. Ltd., Vol. 1272, pp-925-935, 2021.

Programme Chaired

1. National conference on "*Computing and Information systems*" conducted by the Department of Information Technology, Kongu Engineering College, Perundurai, 06th and 07th December, 2016.

Programme Attended

1. STP on "*Microprocessor and Embedded Microcontroller System*" conducted by the Department of Electronics and Communication Engineering, Asansol Engineering college, Asansol, West Bengal during 23.06.2008 - 27.06.2008.

2. SDP on "*Recent Trends in Energy Engineering and Management*" conducted by the Electrical Engineering, PSNA College of Engineering, Dindigul during 25-05-2009 – 05-06-2009.

3. STTP on "*Soft Computing Techniques and their Applications*", conducted by the Department of Electronics & Communication Engineering, NITTTR, Chandigargh during 23.11.2009 - 27.11.2009.

4. STTP on "*Virtual Instrumentation*", conducted by the Department of Electrical Engineering, NITTTR, Chandigargh during 30.11.2009 - 04.12.2009.

5. Workshop on "*Mission 10X*" conducted by Wipro at Bharathiyar College of Engineering, karaikal, during 08-11-2010 – 12-11-2010.

6. STTP on "*Emerging Trends in Variable Speed Drive Technology*" organized by the Department of Electrical Engineering, FEAT, Annamalai University during 13-06-2011 – 26-06-2011.

7. STTP on "*Industrial Pollution – Advanced Technologies in Control and Saftey*" organized by the Department of Chemical Engineering and Technology, FEAT, Annamalai University during 10-06-2013 – 14-06-2013.

8. International Workshop on "*Emerging Trends in Energy Systems Management*" jointly organized by FAET, Annamalai University and Tennessee Technological University during 14-03-2014 – 16-03-2014.

9. STTP on "*Hands on Experience in MATLAB*" organized by the Department of Electronics and Instrumentation Engineering, FEAT, Annamalai University during 01-12-2014 – 05-12-2014.

10. STTP on "*Emerging Trends in Image processing and its Applications*" organized by the Department of Electronics and Instrumentation Engineering, FEAT, Annamalai University during 08-12-2014 – 12-12-2014.

11. STTP on "*MATLAB Applications in Science and Engineering*" organized by the Department of Electronics and Instrumentation Engineering, FEAT, Annamalai University during 08-06-2015 – 12-06-2015.

12. STTP on "*MATLAB and its Hardware Interface*", conducted by the Department of Electrical Engineering, NITTTR, Chandigarh during 28.11.2016 - 02.12.2016.

13. Industrial Training on "*Communication and Networking Technologies"* conducted by BSNL, Meenambakkam, Chennai during 02-02-2021 - 22-02-2021.

Patents Filed

1. Filed patent rights for "*Machine learning based Smart Helmet for Underground Workers".*
   File Number: 202141012134

Invited Lectures

1. *VHDL Programming and FPGA Architecture* in the UGC approved STTP organized by the Department of Electrical Engineering, Annamalai University 21st June 2011.

2. *VLSI Controllers for Power Converters* in the UGC sponsored STTP organized by the Department of Electrical Engineering, Alagappa College of Engineering and Technology, karaikudi, 27th May 2013.

3. *Test Pettern Generation* in the UGC approved STTP organized by the Department of Electrical Engineering, Annamalai University on 25th June 2015.

4. *Recent Trends in Embedded Applications* in the National Conference "Computing and Information systems" conducted by the Department of Information Technology, Kongu Engineering College, Perundurai, 06th and 7th December, 2016.

5. *Serial Communication Interfaces* in the AICTE approved FDP organized by Department of Electrical Engineering, Annamalai University the Department of Electrical Engineering, SSN College of Engineering, Chennai on 17th December 2017.

6. *Testing of Digital Systems* in the National Level Workshop organized by the Department of Electrical Engineering, Cresent College of Engineering on 03-05-2020.

7. *Control Protocols* in the AICTE sponsored FDP organized by the Department of Electrical Engineering, Government College of Engineering, Srirangam on 16-08-2020.