

## SHAIJA P J

### PROFILE

Asst. Professor (Electrical Engg.)  
Model Engineering College, Ernakulam.  
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shaijapj@gmail.com



### EXPERIENCE

18 Years in Teaching  
4 Years in Industry

### EDUCATION

M.Tech –in Opto Electronics  
& Laser Technology

International School of Photonics, Cochin University of  
Science and Technology, Kochi, Kerala (2007)

P. G. Diploma in Management

IGNOU

B Tech – Electrical &  
Electronics Engineering

Mar Athanasius College of Engineering, Kothamangalam,  
M.G. University, Kerala (1996)

### AREAS OF INTEREST

Power Electronics & Drives, Opto Electronics, Electrical Circuits, Power Systems and Electrical  
Machines

### MEMBERSHIP IN PROFESSIONAL BODIES

Life Member ISSE (Indian Society of Systems for Science and Engineering)

Life Member ISTE (Indian Society for Technical Education)

Life Member PSI (Photonics Society of India)

## PUBLICATIONS

### International Journals

1. Neheeda P, Pradeep M and **P J Shaija**, “*Analysis of WDM System with Dispersion Compensation Schemes*”, Elsevier Procedia Computer Science 93 (2016) pp647 – 654.
2. **Shaija P J**, Asha Elizabeth Daniel “*An Intelligent Speed Controller Design for Indirect Vector Controlled Induction Motor Drive System*”, Elsevier Procedia Technology, Volume 25C, 2016, Pages 801-807.
3. Sarath Ganga, **Shaija P J**, “*Design of a Standardized Inter Satellite Optical Wireless Communication (IsOWC) System with Minimum Input Power*”, Elsevier Procedia Technology, Volume 25C, 2016, Pages 567-573.
4. Anjali A K, **Shaija P J**, “*Design and Analysis of Optical CDMA System Based on Application of Code Shifting Technique to 2-D Optical Orthogonal Codes*”, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 5, Issue 6, June 2016, pp 9275 – 9282.
5. Jayasree V.K, **Shaija P.J**, Manu P.John, P. Radhakrishnan, “*An optoelectronic sensor configuration for the determination of age related indices using blood volume pulse*” , Sensors & Transducers Journal, vol.87, Issue 1, January 2008, pp 39-45.
6. Jayasree V.K, **Shaija P.J**, V.P.N Nampoore, C.P.G Vallabhan, P.Radhakrishnan “*A simple and novel integrated Opto electronic system for Blood Volume Pulse sensing and Heart rate monitoring*” in the International Journal of Optomechatronics, 1; 392- 403, October 2007.

### International Conferences

1. Sarath Ganga, **Shaija P J**, “*Design for Optical Wireless Communication between Two Medium Earth Orbit (MEO) Satellites with Minimum Input Power*”, International Conference on Signal Processing & Advanced Communication '16 (SPAAC 16), organized by College of Engineering Cherthala at Le-Meridien International Convention Centre, Kochi on 10th and 11th August 2016.
2. Sera Mathew, **Shaija P.J**, Jayachandran E.S, “*Detection, classification and location of transmission line faults using Discrete Wavelet Transform*”, *Proceedings of the IETE International Conference on Energy and Environment Management* at NSS College of Engineering, Palakkad, 24-25 July 2015.
3. Bibi Mohanan, Samuel Varghese, **Shaija.P.J**, “*Studies on Merged Sagnac-Michelson Interferometer for Detecting Phase Sensitive Events in Fiber Optic Cables*” IEEE International Multi Conference on Automation, Computing, Control, Communication and Compressed Sensing iMac4s-2013 at Palai on 22<sup>nd</sup> & 23<sup>rd</sup> March 2013.
4. Jayasree V.K, Sandhya T V, **Shaija P J**, Radhakrishnan P “*Photoplethysmographic assessment of Skin Vasomotor Reflex using the blood volume pulse measured at the finger tip*”, *Proceedings of the International Conference Photonics 2008*, IIT Delhi, December 13-17, 2008.
5. Sandhya T V, Jayasree V .K, **Shaija P J**, Radhakrishnan P, “*Studies on the effects of air pollutants on the peripheral blood volume pulse using an optical plethysmograph*”, in the *Proceedings of the International Conference Photonics 2008*, IIT Delhi, December 13-17, 2008.
6. **Shaija P.J**, Jayasree V.K, P.Radhakrishnan “*Blood Volume Pulse Sensor using peripheral pulse detected in the Finger tips with Photoplethysmograph and Assessment of Bilateral Symmetry*” in the *International Conference on Sensors and Related Networks*, VIT University, 10 to 14 December 2007, Vellore, Tamilnadu, India.

## National Conferences

1. Jayasree V.K, Sandhya T V, **Shaija P J**, Radhakrishnan P, “Assessment of skin microcirculation using Photoplethysmographic signal measured at the finger tip employing cold exposure test”, All India Seminar on emerging trends in information and communication technology”, August 29 to 30, 2008.
2. Sandhya T V, Jayasree V K, **Shaija P J**, Radhakrishnan P, “ Statistical signal processing approach to assess bilateral symmetry of blood volume pulse recorded at the finger tip using an optoelectronic configuration”, All India Seminar on emerging trends in information and communication technology”, August 29 to 30, 2008
3. **Shaija P.J**, Jayasree V.K, P. Radhakrishnan “Non-Invasive Pulse Wave Velocity Measurement System Using Optical Plethysmograph”, National Seminar on Information, Communication & Intelligent systems at Cochin on 8th & 9<sup>th</sup> February 2008.
4. Jayasree V.K, **Shaija P.J**, P. Radhakrishnan “Age related Index measurement from Peripheral pulse wave detected using Finger tip Photoplethysmograph” in the National Laser Symposium, held at M.S. University of Baroda, Vadodara, Gujarat during December 17 to 20, 2007.

#### COURSES HANDLED

Sl.No	Course Name	UG/PG
1	Opto Electronics	PG (Opto Electronics & Communication Systems)
2	Fibre Optics	PG (Opto Electronics & Communication Systems)
3	Optical Communication Technology	PG (Opto Electronics & Communication Systems)
4	Power Electronics	B Tech Electrical & Electronics Engg. (CUSAT)
5	DC Machines and Transformers	B Tech Electrical & Electronics Engg. (KTU)
6	Linear Control Systems	B Tech Electrical & Electronics Engg. (KTU)
7	Synchronous and Induction	B Tech Electrical & Electronics Engg. (KTU)

	Machines	
8	Circuits and Networks	B Tech Electrical & Electronics Engg. (CUSAT)
9	Introduction to Electrical Engineering	B Tech Electrical & Electronics Engg. (CUSAT)
9	Electrical Machines	B Tech Electrical & Electronics Engg. (CUSAT)
10	Control Systems	B Tech Electrical & Electronics Engg. (CUSAT)
11	Power Systems	B Tech Electrical & Electronics Engg. (CUSAT)
12	Electrical Technology	B Tech Electronics & Communication Engg. (CUSAT)

#### OTHER DUTIES/RESPONSIBILITIES

Technical Advisor, College Maintenance Wing

Member, Internal Write off Technical Committee

Member, College Construction Committee

Member, Institutional Purchase Committee and Technical Committee

Executive Committee Member, College PTA

Staff Advisor to 2017-21 batch Electrical & Electronics Engineering