# Faculty Profile of Dr. J. Vijayakumar



Dr. J. Vijayakumar Associate Professor & Head Department of Electronics & Instrumentation

Email:vijayakumar@buc.edu.in

Phone No:0422-2428498

Mobile No:+91 9786869929

#### Research Area

- Digital Signal & Image Processing
- Embedded systems
- Nanoelectronics

### **Education & Career**

### **Education**

#### Ph.D.

Subject: Information and Communication Engineering

Institution: Nandha Engineering College, Erode

Affiliated University: Anna University

Year of Award: 2015

### M.E.,

Subject : Applied Electronics

Institution: Bannari Amman Institute of Technology, Sathyamangalam

Affiliated University: Anna University

Year of Award: 2005

### B.E.,

Subject: Electronics and Communication Engineering Institution: Maharaja Engineering College, Avinashi

Affiliated University: Bharathiar University

Year of Award: 2003

#### **DECE**

Subject: Diploma in Electronics and Communication Engineering

Institution: Kongu Polytechnic, Erode

Affiliated University: Tamil Nadu Technical Board

Year of Award: 2000

#### Career

### At Bharathiar University (Reverse Order)

Associate Professor: November 2016 to Till Date

#### **Past Experience**

Associate Professor: June 2010 to November 2016 at Nandha College of

Technology, Erode

Senior Lecturer: June 2005 to May 2010 at Mahendra Engineering College,

Tiruchengode

#### **Awards**

#### **Academic awards**

Awarding agency: Outstanding Faculty in Engineering Award

Country: India

Purpose of award : Academic performance

Date of Award: 08.07.2017

Any other details: Outstanding Faculty in Engineering Award

SI. No.: 2

Awarding agency: Friendship Forum of India

Country: India

Purpose of award : Academic performance

Date of Award: 09.09.2020

Any other details: Bharat Excellence Award

Sl. No.: 3

Awarding agency: Friendship Forum of India

Country: India

Purpose of award: Academic performance

Date of Award: 09.09.2020

Any other details: Leading Educationist of India Award

## Membership

# **Membership in Professional Bodies**

Sl. No.: 1

Organization: The Institution of Electronics and Telecommunication

Engineers (IETE)

Type of Membership: Member

Period: Life time

SI. No.: 2

Organization: The Institution of Engineers (IE)

Type of Membership: Member

Period : Life time

### **Membership in Academic Bodies**

Organization: Indian Society of Electronics and Communication Engineers

(ISECE)

Type of Membership : Member

Period: Life time

SI. No.: 2

Organization: The United States Association for Energy Economics (UASEE)

Type of Membership: Member

Period: Life time

#### **Visits**

SI. No.: 1

Countries Vistes: Indonesia, Bali

Duration of Visit: 5 Days

Month and Year: August 2018

Purpose of Visit: Research paper presentation in the International

Conference on Applied Research in Engineering and Management Sciences

### **Collaborators**

#### **Others**

# **Projects**

Funded Projects (National Level)

- Ongoing
- Completed

Ongoing Projects List with necessary Information

# Completed Projects List with necessary Information

# **Consultancy Projects**

- Ongoing
- Completed

Ongoing Consultancy Project Informations
Completed Consultancy Project Informations

### **Research Guidance**

- Post Doc.
- Ph.D.
- M.Phil.
- <u>M.Sc.</u>

# Ongoing

Title

Name

Completed

Title

Name

# Ongoing

SI. No. : 1

Name of the candidate : Jeganson Durai

Name of the candidate: Baskaran,D

Sl. No.: 3

Name of the candidate: Sruthi,K

Sl. No. : 4

Name of the candidate: Thavamani. S

SI. No.: 5

Name of the candidate: Mervin Paulraj, M

Sl. No.: 6

Name of the candidate: Hemalatha, A

Completed

NA

Ongoing

Accordion content 1.

Completed

Accordion content 2.

Ongoing

Accordion content 1.

Completed

Name of the candidate: Hemalatha.A

Title of the Dissertation : A Systematic Algorithm For Denoising Audio Signal

Using Savitzky- Dolay Method

Year : 2018

SI. No.: 2

Name of the candidate: Janani. C

Title of the Dissertation : A Hybrid Real Time Tracking System For Theft

**Detection In Shopping Malls Video Processing** 

Year : 2018

SI. No.: 3

Name of the candidate : Kavipriya. T

Title of the Dissertation : An efficient patient monitoring system using

LabVIEW and Arduino

Year : 2018

Sl. No.: 4

Name of the candidate: Mervin Paulraj M

Title of the Dissertation : Certain Investigation On Vehicles Number Plate

Identification Using Top Hat Transform Algorithm and OCR

Year : 2018

Sl. No.: 5

Name of the candidate: Surya. S

Title of the Dissertation: A LabVIEW based monitoring and control of multi

sensor using NI MYRIO

Year: 2018

Sl. No.: 69

Name of the candidate: Bharathi.M

Title of the Dissertation : A Real Time Monitoring System For Precision

Agriculture Using WSN and LabVIEW

Year: 2019

SI. No.: 7

Name of the candidate: Janani A

Title of the Dissertation: Integrated Mirror

Year : 2019

SI. No.: 8

Name of the candidate: Jayaprakash. N

Title of the Dissertation : A Real Time Signal Processing Windowing

Technique in LabVIEW

Year: 2019

Sl. No.: 9

Name of the candidate : Kanagavel. D

Title of the Dissertation: A Design and Development of Surveillance Robot

Using NI-MYRIO

Year: 2019

SI. No.: 10

Name of the candidate: Karthick Prayeen Kumar, P

Title of the Dissertation: Wire Less Based Industrial Automation

Year : 2019

Sl. No.: 11

Name of the candidate: Naveen K

Title of the Dissertation: Rapid Shutter Camera Security Using Raspberry PI

Year: 2019

Sl. No.: 12

Name of the candidate: Poomani.S

Title of the Dissertation: Identification of Anthracnose Diseased Cotton

Leaves Using DIP and SVM Classifier

Year: 2019

Sl. No.: 13

Name of the candidate: Sruthi.K

Title of the Dissertation: DIP Based Algorithms For Extraction Of Retinal

Blood Vessels and Exudates

Year : 2019

### **Research Publication**

- International
- National
- Patents
- Conferences
- Books/Chapters
- <u>Database</u>

# Reverse Chronological Order

#### 2021

Number. Title Author Names Journal Name

### 2020

Number. Title Author Names Journal Name

2019-2004

26. Experimental Validation of Smart Farming Tool for Modern Agriculture Baskaran, D, Vijayakumar, J International Journal for Science and Advance Research in Technology, 2019.

25. Blood Vessel Extraction From Retinal Fundus Images Using Dip Techniques

Sruthi, K, Vijayakumar, J & Jeganson Durai, L International Journal of Engineering Trends and Technology, 2019.

- 24. A Design and Development of Surveillance Robot using NI-MyRIO Kanagavel, D & Vijayakumar, J & Maheswaran, R International Journal for Research in Applied Science & Engineering Technology, 2019.
- 23. Rapid Shutter Camera Security Using Raspberry Pl Naveen,k & Vijayakumar, J EPRA International Journal of Research and Development 2019
- 22. A Real Time Signal Processing Using Windowing Technique in LabVIEW Jayaprakash, N, Vijayakumar, J & Maheswaran, R EPRA International Journal of Research and Development, 2019.
- 21. Representation of Diseased Retinal Images Using Quantum Fourier Transform
  Dr.J.Vijayakumar & L. Jeganson Durai

International Journal of Research, 2018.

- 20. Certain Investigations on Vehicles Number Plate Identification using Top Hat Transform Algorithm and Optical Character Recognition M. Mervin Paulraj & Dr.J.Vijayakumar International Journal on Future Revolution in Computer Science & Communication Engineering, 2018.
- 19. A Systematic Algorithm for Denoising Audio Signal Using Savitzky Golay Method

Dr.J.Vijayakumar, A. Hemalatha & L. Jeganson Durai International Journal on Future Revolution in Computer Science & Communication Engineering, 2018. 18. An Efficient Edge Detection Algorithm for Reducing the Limitations of Existing Operators

Dr.J.Vijayakumar & L. Jeganson Durai

International Journal of Engineering Trends and Applications, 2018.

17. Performance Analysis for Secure Quantum Image Transmission Using BB84 Protocol

Dr.J.Vijayakumar & L. Jeganson Durai

International Journal of Advanced Engineering Research & Technology, 2018.

16. A Review and Performance Analysis of Image Edge Detection Algorithms Dr.J.Vijayakumar & L. Jeganson Durai International Journal on Future Revolution in Computer Science & Communication Engineering, 2017.

15. Investigation and Monitoring Systems for Powdery Mildew Disease in Sirugamani Variety of Betel Vine Plants Using Digital Image Processing Techniques

Dr.J.Vijayakumar

International Journal on Future Revolution in Computer Science & Communication Engineering, 2017.

14. Study of Turmeric Plant Diseases and Methods of Disease Identification using Digital Image Processing Techniques

Vijayakumar, J

International Journal on Future Revolution in Computer Science & Communication Engineering, 2017.

13. Human Motion Detection in Video Surveillance Using Computer Vision Technique

Vijayakumar, J

International Research Journal of Engineering and Technology, 2017.

12. Investigation and Monitoring Systems For Foot Rot Disease in Sirugamani Variety of Betel Vine Plants Using Digital Image Processing Techniques Vijayakumar, J

International Journal of Innovative Science And Applied Engineering Research, 2016.

11. Powdery Mildew Disease Identification in Pachaikodi Variety of Betel Vine Plants Using Histogram and Neural Network Based Digital Imaging Techniques

Vijayakumar, J & Narmatha, P International Research Journal of Engineering and Technology, 2016.

- 10. A Survey on Early Stage Detection of Microaneurysms Kavitha,N, Dr.J.Vijayakumar, Jayanthi,R & Manju Paarkavi,R International Research Journal of Engineering and Technology, 2016.
- 09. Statistical Analysis Based Foot Rot Disease Identification in Sirugamani Variety of Betel Vine Plants Using Digital Image Processing Techniques Vijayakumar, J

International Journal of Emerging Technologies and Innovative Research, 2016.

08. Powdery mildew disease identification in karpoori variety of betel vine plants using histogram based techniques
Vijayakumar, J

Advances in Image and Video Processing

07. Odium piperis fungus identification for piper betel plants using digital image processing

Vijayakumar, J & Arumugam, S

Journal of Theoretical and Applied Information Technology, 2014.

06. Foot rot disease identification for karpoori variety of betelvine plants using digital imaging technique

Vijayakumar, J & Arumugam, S

Australian Journal of Basic and Applied Sciences, 2013.

05. Disease identification in pachai kodi variety of betelvine plant using digital imaging techniques

Vijayakumar, J & Arumugam, S

Archives Des Sciences 2013

04. Powdery mildew disease identification for vellai kodi variety of betelvine plants using digital image processing

Vijayakumar, J & Arumugam, S

European Journal of Scientific Research, 2012.

03. Early detection of powdery mildew disease for betelvine plants using digital image analysis

Vijayakumar, J & Arumugam, S

International Journal of Modern engineering Research, 2012.

02. Recognition of powdery mildew disease for betelvine plants using digital image processing

Vijayakumar, J & Arumugam, S

International Journal of Distributed and Parallel Systems, 2012.

01. Study of betelvine plants diseases and methods of disease identification using digital image processing

Vijayakumar, J & Arumugam, S

European Journal of Scientific Research, 2012.

1. Foot rot disease identification for the betelvine plants using digital image processing

Vijayakumar, J & Arumugam, S

Journal of Computing, 2011.

2. Foot rot disease identification for vellai kodi variety of betelvine plants using digital image processing'

Vijayakumar, J & Arumugam, S

ICTACT Journal on Image and Video Processing, 2012.

3. Certain Investigation on Cotton Plant Diseases and Identification Methods using DIP Techniques

Poomani, S, Vijayakumar, J & Jeganson Durai, L

South Asian Journal for Engineering and Technology, 2019.

4. Exudates Localization from Retinoblastoma Diseased Fundus Image Sruthi,K, Vijayakumar, J & Jeganson Durai, L

South Asian Journal for Engineering and Technology, 2019.

5. Smart Agriculture Ploughing tool for Agriculture using Embedded System Baskaran,D, Vijayakumar, J

South Asian Journal for Engineering and Technology, 201	9.
Alumini Reflections:	