

Dr. S. KARTHIKEYAN, B.E., M.Tech., Ph.D.

32, Yesodhallam, D.Nagar,

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E-mail: drkarthikeyan.shanmugam@gmail.com**Objective:**

To associate myself with an organization that provides a challenging job and an opportunity to keep in track with the latest technologies and development commensurating with my technical knowledge and academic qualification.

Profile:

- Completed full time **PhD** in Department of Production Engineering, **NIT Trichy**
- Having **4 yrs 6 mths** of experience as **Principal** in an Engineering College
- Total **17 yrs** of experience in various positions of **Teaching Field**
- Having **2 yrs 4 months** of industrial experience in **Production and Quality Field**

EDUCATIONAL QUALIFICATION:

| Sl. No. | Educational Qualification | Specialization / Branch | Institution | Year of Passing | Percentage |
|---------|---------------------------|--------------------------|--|-----------------|---|
| 1 | Ph.D. | Production Engineering | National Institute of Technology, Tiruchirappalli, Tamil Nadu | 2015 | - |
| 2 | M.Tech | Manufacturing Technology | National Institute of Technology, Tiruchirappalli, Tamil Nadu | 2007 | CGPA-8.95 First Class With Distinction |
| 3 | B.E | Mechanical Engineering | Arulmigu Meenakshi Amman College of Engineering, Kanchipuram, Tamil Nadu | 1997 | 71.87% First Class |

Thesis Title:

- **Ph.D.** – Solving Flexible Job shop Scheduling Problems using Nature Inspired Metaheuristic Optimization Approach

- **M.Tech**

Phase-I – Optimization of machining parameters for multi-performance characteristics in turning using grey relational analysis

Phase-II – Optimization of ECM machining parameters for Aluminum Composites using multiple regression and ANN models

PROFESSIONAL EXPERIENCE:

| Sl. No. | Organization | Designation | Period | | Exp. in Yrs | Nature of Job |
|---------|--|----------------------------|------------|------------|------------------|---------------|
| | | | From | To | | |
| 1 | Indra Ganesan College of Engineerig | Professor & Vice Principal | 31-05-2023 | Till date | | Teaching |
| 2 | Sudharsan Engineering College, Pudukkottai | Principal | 03.07.2018 | 06.01.2023 | 7 Yrs 10 mths | Teaching |
| | | Professor & Head | 16.06.2015 | 02.07.2018 | | Teaching |
| | | Associate Professor | 25.02.2015 | 15.06.2015 | | Teaching |
| 3 | Mookambigai College of Engineering, Trichy | Assistant Professor | 20.01.2011 | 30.07.2011 | 6 mths | Teaching |
| 4 | ETLA Ltd, Singapore | Assistant Engineer | 02.06.2008 | 25.10.2010 | 2 Yrs 4 mths | Industry |
| 5 | Mookambigai College of Engineering, Trichy | Assistant Professor | 01.01.2008 | 08.05.2008 | 9 Yrs 8 mths | Teaching |
| | | Lecturer | 19.08.1998 | 31.12.2007 | | Teaching |

ROLES & RESPONSIBILITIES:

Administrative Responsibilities: Head – Department of Mechanical Engineering,
Vice Principal

Principal

- Directing and Controlling nearly 600 students and 85 staff members as a head of the institution.
- Associated with AICTE approval & Anna University Affiliation process of the institution.
- Strengthening the academic delivering mechanism to enhance students' academic performance.
- Implementation of cost reduction and waste reduction methods in administrative work.
- Formulation of Admission strategies to improve student admission.
- Convened student activities like symposium and workshops as head of the mechanical engineering department.
- Maintained academic discipline in the department.
- Conducted University Examination as a Chief Superintendent.
- Worked for Accreditation.

CONFERENCES:

- Application of Taguchi method in the Optimization of Cutting parameters for surface roughness in turning AISI 4140 steel - *UGC Sponsored National Conference on Recent Developments in Production and Operations Management, Annamalai University.*
- Fabrication of Micro machines using LIGA process - *National Conference on Recent Advancement in Mechanical Engineering, K.S.Rangasamy College of Technology.*
- Development of Multi-Objective Optimization Models for ECM Parameters on Machining Al-10%SiC Composites - *National Conference CITTMEP2008 – A.V.C College of Engineering.*
- A hybrid firefly algorithm for solving bi-criteria flexible job shop scheduling problem - *International Conference on Industrial Engineering ICIE2013 – Sardar Vallabhbhai National Institute of Technology, Surat, Nov-2013.*
- A hybrid discrete firefly algorithm for flexible job shop scheduling problem with maintenance activities, *International Conference on Advances in Industrial Engineering ICIEA2014, Anna University, Chennai, January 2014.*

WORKSHOPS ATTENDED:

- Workshop on **Emerging Trends in Thermal Power Plant Design** conducted by Shanmuga College of Engineering, Thanjavur.
- Workshop on **Computer Aided Manufacturing** conducted by National Institute of Technology, Trichy.
- Workshop on **Recent Trends in Manufacturing and Materials** conducted by National Institute of Technology, Trichy.
- Workshop on **Recent Trends in Supply Chain Management** conducted by National Institute of Technology, Trichy.
- Workshop on **Quality Engineering in Manufacturing** conducted by National Institute of Technology, Trichy.
- Two day workshop on **LABVIEW software** conducted by K.S.Rangasamy College of Technology.

PUBLICATIONS:

1. P. Asokan, R. Jeyapaul, **S. Karthikeyan**, “Optimization of machining parameters for multiple performance characteristics in turning using grey relational analysis”, *Journal of Manufacturing Technology and Research*, 3, (3 & 4), 46-51, 2006.
2. **S. Karthikeyan**, P. Asokan, S. Nickolas, “A hybrid firefly algorithm for multi-objective flexible job shop scheduling problems”, *International Journal of Production Technology and Management Research*, 3 (2); 89-98, 2012.
3. **S. Karthikeyan**, P. Asokan, S. Nickolas, Tom Page, “Solving flexible job shop scheduling problem using hybrid particle swarm optimization algorithm and data mining”, *International Journal of Manufacturing Technology and Management*, 26 (1/2/3/4); 81-103, 2012.
4. **S. Karthikeyan**, P. Asokan, S. Nickolas, “A hybrid discrete firefly algorithm for solving multi-objective flexible job shop scheduling problem with limited resource constraints”, *International Journal of Advanced Manufacturing Technology*, 72 (9-12); 1567-1579, 2014.
5. **S. Karthikeyan**, P. Asokan, M. Chandrasekaran, “A hybrid discrete firefly algorithm for multi-objective flexible job shop scheduling problems with maintenance activity”, *Applied Mechanics and Materials*, 575; 922-925, 2014.
6. **S. Karthikeyan**, P. Asokan, S. Nickolas, Tom Page, “A hybrid discrete firefly algorithm for solving multi-objective flexible job shop scheduling problems”, *International Journal of Bio Inspired Computation*. 7 (6); 386-401, 2015

SUBJECTS TAUGHT

- Engineering Thermodynamics
- Thermal Engineering
- Power plant engineering
- Engineering graphics
- Industrial robotics
- Production Planning and Control

- Analysis and Control of Manufacturing Systems
- Integrated Material Management

RESEARCH INTEREST

- Flexible Manufacturing System
- Operations Management
- Scheduling
- Optimization

Skill Set:

Modeling : Pro/E Wildfire 2.0, Autodesk Inventor
Application Package : MS Word, Excel

Strengths:

- Having an ability to handle pressurized situations.
- I believe in achieving results against all odds
- I can easily create good rapport with the workers.
- Hard worker with high energy level.

Membership in Professional Bodies: Life Member in ISTE

Recognized Anna University Research Supervisor Ref. No. 2720089

Personal Information:

Date of Birth and Age : 28.07.1976
Nationality : Indian
Father's Name : P. Shanmugam
Languages Known : Tamil, English
Passport No : G7900121
Marital Status : Married
Permanent address : No32, YesodhaIllam
D.Nagar, Thiruverumbur,
Tiruchirappalli-620013
Tamilnadu (India)

Reference:

1. Dr.P.Asokan
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2. Dr.C.Sathiyarayanan
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Declaration:

I certify that the above information given by me is true to the best of my knowledge.

Place : Trichy

Date : 23-09-2023

Karthikeyan. S