

# BIO-DATA

## ANISH NAIR



### INDUSTRIAL /ACADEMIC EXPERIENCE:

#### 1. LARSEN & TOUBRO LIMITED - ECC DIVISION, Angul, Orissa

Designation: Planning Engineer – Trainee

Duration: July 2009 to May 2010

#### 2. EID PARRY INDIA LTD, Cuddalore, Tamil Nadu

Designation: Deputy Manager-Maintenance

Duration: 12<sup>th</sup> July 2010 to 17<sup>th</sup> October 2011

#### 3. SVN COLLEGE OF ENGINEERING, Alappuzha, Kerala

Designation: Assistant Professor – Mechanical Engineering

Duration: 3<sup>rd</sup> June 2013 to 8<sup>th</sup> August 2014

#### 4. KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION, Krishnankoil (Current position)

Designation: Assistant Professor Senior Grade – Mechanical Engineering

Duration: 24<sup>th</sup> July 2018 till date

### EDUCATIONAL QUALIFICATION:

#### Doctorate:

Full time Ph.D. in Production Engineering (2014-2018) at National Institute of Technology Tiruchirappalli, Tamil Nadu.

- Thesis title – Investigations on wire electrical discharge and abrasive water jet machining of Inconel 617

#### Post-Graduation:

M.Tech - Advanced Manufacturing and Systems Design (2011-2013) in Government college of Engineering, Kannur, Kerala.

Semester	I	2	3	4	CGPA
SGPA	8.00	8.27	10.00	9.00	8.53

- M.Tech thesis - Experimental investigations on the optimization of surface quality and productivity in CNC end milling process.

#### Under-Graduation:

B.E - Mechanical (2005-2009) at Coimbatore Institute of Technology, Coimbatore

SEMESTER	I	2	3	4	5	6	7	8	CGPA
GPA	8.63	8.09	6.26	7.19	7.32	7.83	7.75	8.40	7.59

- Project on Cops and pumps arrangement system working model for use in Textile industry.

## **OTHER EDUCATIONAL DETAILS:**

Exam	School	Year	Percentage
Matriculation	Perks Matriculation School, Coimbatore	2003	89%
Higher secondary	G.D Matriculation School, Coimbatore	2005	95%

### **Areas of Interest**

- Traditional and nontraditional machining processes
- Advanced optimization techniques
- Laser processing of materials (Laser Cladding)
- Intelligent decision-making tools, Machine learning and Data analysis techniques

### **Awards/Certifications**

- Secured **Centum in Mathematics** in the State higher Secondary Board Exams.
- Completed Auto Cad Level I and Level II.
- Secured **II prize for the best presentation** in the National conference on Emerging trends in Manufacturing and Mechanical Engineering conducted at Government college of Engineering, Kannur on March 24, 2013.
- Awarded the **best presentation in the National conference** on Systems, Energy and Environment (NCSEE 2013) held on 2, 3 August, 2013 at Government college of Engineering Kannur.
- Awarded the **best paper in the “International conference** on modelling optimization and computing (ICMOC 2014)” conducted at Noorul Islam University, Nagercoil.
- Awarded the **best faculty award** for the year 2013-2014 at SVN College of engineering, Alappuzha.
- Certified Faculty development programme in NPTEL “Introduction to advanced abrasive finishing processes” in Aug-Sep 2018.
- Secured **Certified User status for Autodesk-Fusion 360** with a score of 918.
- Article was adjudged as the **best paper in the International conference** on materials and intelligent manufacturing - ICMIM 2017 held at National University of Singapore.
- Represented the PhD team and secured the **II prize in the Inter NITT badminton** championship 2018.
- Secured the **International travel support for young scientists by DST** for attending the conference in Malaysia in 2018.

### **Training / Workshops:**

- In-plant training at Sri Sakthi Amman Foundry, Coimbatore, from 02.05.2007 to 16.05.2007.
- In-plant training at Jay Pumps, Coimbatore, from 17.05.2007 to 31.05.2007.
- In-plant training at Quilon Cooperative Spinning mill, Kollam, Kerala from 01.10.12 to 08.10.12.
- Participated in the “One day workshop on Research methodology in Science and Engineering” on 5th December, 2013 at SVN college of Engineering, Alappuzha.

- Attended the five-day workshop on “Research document preparation using LATEX” from 16th to 20th December, 2013 conducted at College of Engineering Trivandrum.
- Participated in “One day course on microscopic techniques in materials characterization” on 10th October 2014 at NIT Trichy.
- Participated in “One day course in Structural characterization” on 14th October 2014 at NIT Trichy.
- Participated in the “National Workshop on Intelligent Systems Engineering” during 27-28 July 2017 organized by National Institute of Technology Tiruchirappalli.
- Participated in the 2-day Workshop on Modelling and Simulation of Engineering Systems at NIT Trichy from March 21-22, 2018.
- Participated in the Indian Technology Congress 2018 during September 5-6, 2018 at Bangalore.
- Participated in One Week course in ‘Recent trends in materials and manufacturing processes’ conducted by NIT Trichy from December 10-15, 2018.
- Participated in 5-day workshop in “Technical writing and publishing with advanced computer tools” conducted by Indian Institute of Information Technology in Design and Manufacturing (IIITDM Kanchipuram) from 25-29<sup>th</sup> May, 2019.
- Participated in 5-day workshop in “Intellectual Property Rights and Entrepreneurship Development” conducted by National Institute of Technology Tiruchirappalli from 9-13<sup>th</sup> December, 2019.

#### **ADMINISTRATIVE RESPONSIBILITIES HELD**

Sl. No	Detail of Activities (Name/Place etc.)	Level (Department/ School/University)	Acted as
1.	IUCEE NEP Coordinator	University	Coordinator
2.	IUCEE “Online Teaching”	External	Instructor
3.	NAAC Criterion I	Department	In charge
4.	PG – ISE NBA Criterion 2	Department	In charge

#### **EVENTS ORGANIZED**

- Organized the National conference on Systems, Energy and Environment (NCSEE 2013) held on 2, 3 August, 2013 at Government college of Engineering Kannur.
- Organizer of the 3-day workshop on ‘Advancements in Heat pipe Technology’ held at Government college of Engineering, Kannur.
- Co-organizer of the International Conference on Advances in Production and Industrial Engineering (INCAPIE ’15) held at NIT Trichy on 20-21 February, 2015.
- Organizer of the Faculty Development Programme on ‘Advances in Production and Industrial Engineering’ conducted at Kalasalingam Academy of Research and Education from 25<sup>th</sup> May 2020 to 30<sup>th</sup> May 2020.
- Co-organizing secretary of the International Conference on Advanced Automotive and Mechanical Systems (INCAAMS 2021) conducted at Kalasalingam Academy of Research and Education from 2-3 May, 2021.

**INVITED LECTURES DELIVERED**

Year	Role	Title	Level	Title of the lecture	Date	Organizer
2020	Invited lecture	Margadarshan	National	Usage of Interactive Teaching aids	13.05.2020	AICTE
2020	Invited lecture	FIP	National	Engineering is Fun	05.11.2020	Al-Azhar College of Engineering & Technology
2020	Invited lecture	Training	National	Effective and interactive online teaching	10.11.2020	CAPE Institute of Technology
2020	Invited lecture	Training	University	Digital tools for teaching	16.06.2020	FACLT, KARE
2020	Invited lecture	Training	University	Tools for Online teaching	04.08.2020	KARE
2020	Invited lecture	Training	National	Online and interactive teaching	12.08.2020	Kalasalingam Institute of Technology
2020	Invited lecture	Training	University	FIP – First year students	09-19.09.2020	KARE
2020	Trainer	Online course	National	Digital teaching	July to September 2020	IUCEE
2021	Trainer	Faculty Induction	University	Faculty onboarding for online teaching methods	06.07.2021	FACLT, KARE

**JOURNALS PUBLISHED:**

S. No.	Journal	Title	DoI	Year
1.	Materials Today ( <b>Scopus</b> )	Heuristic optimization techniques in abrasive water jet hole making—A case study	Accepted and awaiting publication	
2.	Materials Today ( <b>Scopus</b> )	Multi-performance optimization in wire EDM of Inconel 617 using GRA and genetic algorithm	Accepted and awaiting publication	
3.	American Institute of Physics ( <b>Scopus</b> )	Quantitative survey on the machining of superalloys using BibExcel	Accepted and awaiting publication	
4.	Journal of Testing and Evaluation – ASTM ( <b>IF – 0.9</b> )	Evaluation and optimization of geometric deviations in abrasive water jet profile cutting of Inconel 617	<a href="https://doi.org/10.1520/JTE20200036">https://doi.org/10.1520/JTE20200036</a>	2020
5.	Optik – Elsevier ( <b>IF – 1.9</b> )	Studies on effect of laser processed Stellite 6 material and its electrochemical behaviour	<a href="https://doi.org/10.1016/j.ijleo.2020.165221">https://doi.org/10.1016/j.ijleo.2020.165221</a>	2020
6.	INCAS BULLETIN ( <b>Scopus</b> )	Fabrication and Investigation of Al2024-B4c-Tic Hybrid Metal Matrix Composites using Laser Beam Machining	<a href="https://doi.org/10.13111/2066-8201.2020.12.3.19">https://doi.org/10.13111/2066-8201.2020.12.3.19</a>	2020
7.	Materials Today ( <b>Scopus</b> )	Geometric characteristics analysis of hole making through abrasive water jet drilling	<a href="https://doi.org/10.1016/j.matpr.2020.07.430">https://doi.org/10.1016/j.matpr.2020.07.430</a>	2020
8.	Materials Today ( <b>Scopus</b> )	Laser cladding of Stellite 6 on EN8 steel – A fuzzy modelling approach	<a href="https://doi.org/10.1016/j.matpr.2020.07.431">https://doi.org/10.1016/j.matpr.2020.07.431</a>	2020
9.	Journal of the Brazilian Society of Mechanical Sciences and Engineering – Springer ( <b>IF – 1.235</b> )	Optimization of size and form characteristics using multi objective grey analysis in abrasive water jet drilling of Inconel 617	<a href="https://doi.org/10.1007/s40430-018-1042-7">https://doi.org/10.1007/s40430-018-1042-7</a>	2018
10.	Materials and Manufacturing processes – Taylor and Francis ( <b>IF – 2.274</b> )	Multi-performance optimization of abrasive water jet machining of Inconel 617 using WPCA	<a href="https://doi.org/10.1080/10426914.2016.1244844">https://doi.org/10.1080/10426914.2016.1244844</a>	2017
11.	IOP Conference Series: Materials Science and Engineering ( <b>SCOPUS</b> )	Prediction of multi performance characteristics of wire EDM process using grey ANFIS	<a href="https://doi.org/10.1088/1757-899X/244/1/012003">https://doi.org/10.1088/1757-899X/244/1/012003</a>	2017

S. No.	Journal	Title	DoI	Year
12.	Procedia Engineering – Elsevier (SCOPUS)	A Comparison between different Optimization Techniques for CNC End Milling Process	<a href="https://doi.org/10.1016/j.proeng.2014.12.222">https://doi.org/10.1016/j.proeng.2014.12.222</a>	2014
13.	International Journal of Mechanical and Production Engineering Research and Development (SCOPUS)	Optimization of CNC End Milling of Brass using Hybrid Taguchi Method Using PCA and Grey Relational Analysis	<a href="http://www.tjprc.org/publishpapers/2-67-1361864706-24.Optimizarion.full.pdf">http://www.tjprc.org/publishpapers/2-67-1361864706-24.Optimizarion.full.pdf</a>	2013
14.	International Journal of Research in Mechanical Engineering and Technology	Multiple Surface Roughness Characteristics Optimization in CNC End Milling of Aluminium using PCA	<a href="https://orbit.dtu.dk/en/publications/multiple-surface-roughness-characteristics-optimization-in-cnc-en">https://orbit.dtu.dk/en/publications/multiple-surface-roughness-characteristics-optimization-in-cnc-en</a>	2013
15.	International Journal on Theoretical and Applied Research in Mechanical Engineering	Design of Pneumatic Collapsible Steering	<a href="https://www.yumpu.com/en/document/view/41329050/design-of-pneumatic-collapsible-steering-ird-india">https://www.yumpu.com/en/document/view/41329050/design-of-pneumatic-collapsible-steering-ird-india</a>	2013
16.	International Journal on Theoretical and Applied Research in Mechanical Engineering	Optimization of CNC End Milling using Hybrid Taguchi Method using Principal Components Analysis and Utility Theory	<a href="https://api.semanticscholar.org/CorpusID:212542884">https://api.semanticscholar.org/CorpusID:212542884</a>	2013
<b>PUBLICATIONS IN EDUCATION TRANSFORMATION JOURNALS</b>				
1.	Journal of Engineering Education Transformations (Scopus)	Analysis of student satisfaction in the current online teaching scenario	10.16920/jeet/2021/v34i0/I57214	2021
2.	Journal of Engineering Education Transformations (Scopus)	Digital pedagogy implementation in engineering using SMART mobiles	10.16920/jeet/2021/v34i0/I57163	2021

### **CONFERENCES ATTENDED:**

S. No.	Name of organization	Conference Name	Article name	Year
1	Institute of research and development India	International conference on advanced engineering technology (ICAET 2013)	Design of pneumatic collapsible steering	2013
2	Institute of research and development India	International conference on advanced engineering technology (ICAET 2013)	Optimization of CNC end milling using hybrid Taguchi method using Principal Components Analysis and Utility theory	2013
3	IR NET	International conference on mechanical and industrial engineering (ICMIE 2013)	A review on precision machining of glass	2013
4	National Engineering College, Kovilpatti	National conference on recent advances in mechanical engineering (RAIME 2013)	An investigation on the effect of cryogenic cooling for micro machining of soft polymer material	2013
5	Government college of engineering, Kannur	National conference on emerging trends in manufacturing science and mechanical engineering	Optimization of CNC end milling of aluminium with multiple surface roughness characteristics	2013
6	Government college of engineering, Kannur	National conference on science energy and environment (NCSEE 2013)	Comparison of PCA based utility theory and grey relational analysis on optimization of end milling	2013
7	Noorul Islam University, Nagercoil	International conference on modelling optimization and computing (ICMOC 2014)	Simultaneous optimization of productivity and surface quality using TOPSIS	2014
8	Vellore Institute of Technology	12th Global congress on manufacturing and management, (GCOMM 2014)	A Comparison between different Optimization Techniques for CNC End Milling Process	2014
9	National Institute of Technology, Trichy	International conference on advances in production and industrial engineering, (INCAPIE 2015)	Newer materials for supercritical power plant components - A manufacturability study	2015
10	National University of Singapore	International conference on materials and intelligent manufacturing, (ICMIM2017)	Prediction of multi performance characteristics of Wire EDM process using grey ANFIS	2017

S. No.	Name of organization	Conference Name	Article name	Year
II	Curtin University, Malaysia	3 <sup>rd</sup> International Materials, Industrial & Manufacturing Engineering Conference, (MIMEC 2017)	Machining Quality Prediction in Abrasive Water Jet processing of Superalloys using Artificial Neural Network trained by PSO	2017

### **Book Chapters:**

S. No.	Book Name / Publisher	Title of the Book chapter	DoI	Year
I	Intelligent Manufacturing. Materials Forming, Machining and Tribology. Springer	Hybrid Approach for Prediction and Modelling of Abrasive Water Jet Machining Parameter on Al-NiTi Composites	<a href="https://doi.org/10.1007/978-3-030-50312-3_8">https://doi.org/10.1007/978-3-030-50312-3_8</a>	2020

### **Student presentations:**

1. Profile cutting of Inconel 617 – A comparison between wire EDM and abrasive water jet machining process in NSEST-2019 on 19-20th July, 2019 at IISc Bengaluru.
2. “Laser cladding of stellite 6 on EN8 steel” in NUTPUM National conference on 7-8<sup>th</sup> March, 2020 at Kalasalingam Academy of Research and Education.

### **PERSONAL DETAILS:**

**Date of Birth:** 12.09.1987

**Marital Status:** Married

**Sex:** Male

**Nationality:** Indian

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**E-mail id:** anishn@live.com

Languages Known	Read	Write	Speak
English	✓	✓	✓
Hindi	✓	✓	✓
Malayalam	✓	✓	✓
Tamil	✓	✗	✓

I, Anish Nair hereby declare that all the details furnished above are true to the best of my knowledge.