

CURRICULUM VITAE

Dr. ANANTHA RAMAN L., M.E., Ph.D.

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PROFESSIONAL OBJECTIVE

- ✓ To have a career, that gives a good opportunity to prove my potential and to improve my knowledge and skill.
- ✓ To attain a good position in a globally competitive organization and to attain self-reliance in professional and financial spheres, in a rewarding environment.

ACADEMIC PROFILE

Course	Institution	Board/ University	Year of Passing	Score Percentage
Ph.D. Thermal Engineering	Anna University, Chennai, Tamilnadu.	Anna University, Chennai	2021	CGPA 8.21 (Course Work)
M.E. Thermal Engineering	Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu.	Anna University, Chennai	2012	CGPA 8.83 1 st Class
B.E. Aeronautical Engineering	Infant Jesus College of Engineering, Tirunelveli, Tamilnadu.	Anna University, Chennai	2009	78.5% 1 st Class with Distinction
H.S.C	Sri Venkateswara Matriculation Higher Secondary School, Tiruvallur, Tamilnadu.	State Board Tamilnadu	2005	81% 1 st Class
S.S.L.C	Sri Venkateswara Matriculation Higher Secondary School, Tiruvallur, Tamilnadu.	Matriculation Tamilnadu	2003	82% 1 st Class

PUBLICATIONS

Total Publications: **24**.

International Journals: **22** | National Journals: **02**.

WOS/SCI/SCIE: **6** | SCOPUS: **4** | UGC / Google Scholar: **14**.

SCOPUS h-index: **5** | SCOPUS Total Citations: **268**.

Google Scholar h-index: **5** | i10-index: **4** | Google Scholar Total Citations: **330**.

INTERNATIONAL JOURNALS

Web of Science / SCI / SCIE:

"Shear strength, wear, thermal conductivity, and hydrophobicity behavior of fox millet husk biosilica and *Amaranthus dubius* stem fiber-reinforced epoxy composite: a concept of biomass conversion", *Biomass Conversion and Biorefinery – Springer Nature*, 2023 <https://doi.org/10.1007/s13399-023-04854-x> (Impact Factor: 4.1)

"Effect of Adding Rice Husk Ash Functional Silicon Additives on Flammability Wear and Thermal Stability of Ramie-Epoxy Composite", *Silicon – Springer Nature*, 2023 <https://doi.org/10.1007/s12633-023-02463-x> (Impact Factor: 2.941)

"Assessment of charging technologies, infrastructure and charging station recommendation schemes of electric vehicles: A review", *Ain Shams Engineering Journal – Elsevier*, Vol. 14, Issue4, PP: 101938, 2023, doi: doi.org/10.1016/j.asej.2022.101938 (Impact Factor: 4.79)

"Investigation and Optimization of Machining Parameters Influence on Surface Roughness in Turning AISI 4340 Steel", *FME Transactions*, Vol. 48, No. 2, PP: 383-390, 2020, doi:10.5937/fme2002383B. (Impact Factor: 4.374)

"Experimental investigation on performance, combustion and emission analysis of a direct injection diesel engine fuelled with rapeseed oil biodiesel", *Fuel – Elsevier*, Vol. 246, PP: 69-74, 2019, doi.org/10.1016/j.fuel.2019.02.106. (Impact Factor: 8.035)

"Study on Performance and Emission Characteristics of a Single Cylinder Diesel Engine using Exhaust Gas Recirculation", *Thermal Science*, Vol. 21, Supplement 02, PP: S435-S441, 2017, ISSN 2334-7163. (Impact Factor: 1.971)

SCOPUS:

"Influence of Metallic Particles on Properties of Aluminium Composites through Taguchi Technique", *Advances in Materials Science and Engineering*, Vol. 2023, Article ID: 9637728, 2023, doi: 10.1155/2023/9637728.

"A review on recent trends in the microbial production of biodiesel", *AIP Conference Proceedings*, Vol. 2396, PP: 020007-1 – 020007-15, 2021, doi:10.1063/5.0066418.

"Performance and emission characteristics of low heat rejection diesel engine fuelled with rice bran oil biodiesel", *Advanced Materials Research*, Vol. 768, Pg. 245-249, 2013, doi: 10.4028/www.scientific.net/AMR.768.245.

"The Effect of Preheated Crude Palm Oil on Performance and Emission Characteristics of a Compression Ignition Engine", Applied Mechanics and Materials, Vol. 110-116, Pg. 142-147, Oct 2011, doi: 10.4028/www.scientific.net/AMM.110-116.142.

UGC / Google Scholar:

"An Optimization of Micro-Drilling Parameters in Carbon Fiber Reinforced Polymer Using Grey Relation Analysis", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Vol. 9, PP: 111-116, 2019, ISSN(P): 2249-6890; ISSN(E): 2249-8001.

"Experimentation and Comparative Study of E6013 and E7018 Weldments using Shielded Metal Arc Welding", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Vol. 8, Issue 8, PP: 169-174, 2018, ISSN(P): 2249-6890; ISSN(E): 2249-8001.

"Preparation of Paper Nanomaterials in Aviation Field", Transactions on Innovations in Science and Technology, Vol. 02, Issue 01, PP: 125-127, May 2017, EISSN 2456-5075.

"Case Study of GTRE GTX 35-VS Kaveri", Transactions on Innovations in Science and Technology, Vol. 02, Issue 01, PP: 107-109, May 2017, EISSN 2456-5075.

"Thrust Augmentation Methods in Turbojet Engines – A Case Study", Transactions on Innovations in Science and Technology, Vol. 02, Issue 01, PP: 19-23, May 2017, EISSN 2456-5075.

"Study of Wing Properties with Winglets", Transactions on Innovations in Science and Technology, Vol. 02, Issue 01, PP: 14-18, May 2017, EISSN 2456-5075.

"Comparative Study of ICBMS (AGNI 5 and DONG FENG 31)", Transactions on Innovations in Science and Technology, Vol. 02, Issue 01, PP: 01-05, May 2017, EISSN 2456-5075.

"Proposal for an Interplanetary CubeSat Data Relay Constellation", Journal of Advanced Engineering Research, Vol. 04, Issue 01, PP: 51-58, May 2017, EISSN 2393-8447.

"Catalytic Converter for Ozone Decomposition in Aircraft Cabins", Journal of Advanced Engineering Research, Vol. 03, Issue 01, PP: 33-39, Jun 2016, EISSN 2393-8447.

"Methods for Reducing Aerodynamic Drag in Vehicles and thus Acquiring Fuel Economy", Journal of Advanced Engineering Research, Vol. 03, Issue 01, PP: 26-32, Jun 2016, EISSN 2393-8447.

"Effect of Thermal Barrier Coating on Performance and Emission Characteristics of a Diesel Engine", International Journal of Advanced Engineering Technology, Vol. VII, Issue I, PP: 851-853, Jan-March 2016, EISSN 0976 – 3945.

"CFD Modelling and Experimental Measurement of Fluid Flow Characteristics, Swirl Motion, Tumble Motion in Compression Ignition Engines – A Review", Journal of Research Innovations in Engineering and Technology, PP: 16-24, July – December 2015, ISSN (Print) 2321 – 6603.

"Rice bran oil biodiesel: an alternate fuel for CI engine", Indian journal of engineering, 4(10), PP: 28-30, Aug, 2013, ISSN 2319 – 7757, EISSN 2319 – 7765.

"Quantified Aerodynamics for Flapping Wings", TSEST Transaction on Control and Mechanical Systems, Vol. 1 No:8, Pg. 335-338, Dec 2012, ISSN: 2345-234X.

CONFERENCES

International Conferences: **11** | National Conferences: **01**

INTERNATIONAL CONFERENCES

Anantha Raman, "A review on recent trends in the microbial production of biodiesel", International Conference on Energy & Environment, (ICEE-2021), April 09-10, 2021, JECC, Trichur, Kerala, Proceedings Page no: 271.

Anantha Raman Lakshmipathi, "Design and Analysis of Wind Box Segment in Travelling Grate Stoker Boiler Using CFD", International Conference on Advancements in Mechanical Engineering, ICAME 2019, JEC Thrissur, April 2019.

Anantha Raman Lakshmipathi, "Investigation and Optimization of Machining Parameters Influence on Surface Roughness in Turning AISI 4340 Steel", International Conference on Recent Developments in Mechanical Engineering, ICRDME 2019, SAEC Chennai, March 2019.

Anantha Raman Lakshmipathi, "Experimentation and Comparative Study of E6013 And E7018 Weldments Using Shielded Metal Arc Welding", International Conference on Automobile, Marine and Mechanical Engineering, ICAMME 2018, SVCE Chennai, May 2018.

Anantha Raman, "Experimental Investigation on Performance, Combustion and Emission Analysis of a Direct Injection Diesel Engine fuelled with Rapeseed Oil Biodiesel", International Conference on Energy and Environment: Global Challenges, ICEE 2018, NIT Calicut, March 2018.

Anantha Raman, "Study on Performance and Emission Characteristics of a Single Cylinder Diesel Engine Using Exhaust Gas Recirculation", International Conference on Renewable and Sustainable Energy, ICRSE2017, April 2017.

Anantha Raman, "Performance, Combustion and Emission Analysis of a Compression Ignition Engine Using Rapeseed Oil Bio-Diesel", International Conference on Renewable and Sustainable Energy, ICRSE2017, April 2017.

Anantha Raman, "Effective Utilization of Shell Scripts for Scheduled Failsafe File and Database Backups in Linux-based Web Servers", International Conference on Recent Innovations in Science and Technology, RIST 2017, 25th March 2017.

Anantha Raman, "Performance and emission characteristics of a low heat rejection diesel engine fueled with rapeseed oil biodiesel", International Conference on Recent Innovations in Science and Technology, RIST 2017, 25th March 2017.

Anantha Raman, "Investigation of rice bran oil biodiesel as fuel in a compression ignition engine", Energy Efficient Technologies for Sustainability (ICEETS), 2013 International Conference, pp.326-328, 10-12 April 2013, doi: 10.1109/ICEETS.2013.6533403.

Anantha Raman, "Evaluation of 2-Ethoxy Ethyl Acetate as a Blend Component for Diesel in CI Engine", International Conference on Advances in Engineering and Technology, (ICAET-2011), May 27-28, 2011, CiIT Catalog Number: 11-05-0006, ISBN Number: 978-1-4507-6433-9.

NATIONAL CONFERENCES (INDIA)

Anantha Raman, "Performance, combustion and emission analysis of a compression ignition engine using rapeseed oil biodiesel", National Conference on Waste to Energy, Carbon Capture and Storage, NCWECCS 2017, August 2017.

PATENTS

Patents Filed: **12** | Patents Published: **2** | Patents Granted: **10**.

Title of Invention: **MACHINE LEARNING BASED HUMANOID DEVICE FOR OBJECT IDENTIFICATION**; Design number: 391763-001; Publication Date: 11/10/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **SOLAR POWERED GLASS CLEANING ROBOT**; Design number: 392222-001; Publication Date: 27/09/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **AN INTELLIGENCE SENSOR BASED BIODEGRADABLE WASTE COLLECTION UNIT**; Design number: 389840-001; Publication Date: 26/09/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **IOT BASED SOLAR POWERED AGRICULTURE ROBOT**; Design number: 389052-001; Publication Date: 23/08/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **MILK QUALITY ANALYSING DEVICE**; Design number: 382160-001; Publication Date: 25/05/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **AIR AND WATER QUALITY IDENTIFYING PEN**; Design number: 382157-001; Publication Date: 23/05/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **HYDROGEN FUEL BIKE**; Design number: 381139-001; Publication Date: 23/05/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **BATTERY PACK FOR ELECTRIC VEHICLE**; Design number: 381042-001; Publication Date: 18/05/2023; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **AUTOMATED HEADLIGHT INTENSITY CONTROLLER FOR BIKE**; Design number: 6275188; Grant date: 24/04/2023; Role: Inventor; Published in: Intellectual Property Office, United Kingdom.

Title of Invention: **A CONSTRUCTION SITE SUPERVISION SYSTEM BASED ON INTERNET OF THINGS AND BLOCK CHAIN**; Dokumenten Referenz-Nr. (DRN): 2022022211203800DE; Patent No.: 20 2022 100 981; Grant Date: 07/03/2022; Role: Applicant & Reviewer; Published in: Deutsches Patent- und Markenamt.

Title of Invention: **EDM ELECTROLYTE WITH BIODEGRABABLE OIL AND NANO PARTICLE FOR HASTE ALLOY**; Application No: 201941042244 A; Publication Date: 01/11/2019; Role: Inventor; Published in: The Patent Office Journal (India) no: 44/2019 Dated 01/11/2019.

Title of Invention: **SMART BIO – TRANSESTERIFICATION PROCESS FOR BIODIESEL EXTRACTION**; Application No: 201941026612 A; Publication Date: 02/08/2019; Role: Applicant & Inventor; Published in: The Patent Office Journal (India) no: 31/2019 Dated 02/08/2019.

BOOKS / BOOK CHAPTERS

Books Published: **2**

Book Title: **THERMODYNAMICS FIELD FORMULATION AND TURBULENT MODELING**; Published on: 05-05-2023; Published by: COSMAS Scientific Publications; ISBN: 978-81-962332-7-3; DOI: doi.org/10.5281/zenodo.7806190; Online Link: <https://cosmas.org/store/engineering/thermodynamics-field-formulation-and-turbulent-modeling>

Book Title: **COMPETITIVE MANUFACTURING**; Published on: 21-12-2022; Published by: COSMAS Scientific Publications; ISBN: 978-81-956780-6-8; DOI: <https://doi.org/10.5281/zenodo.7454583>; Online Link: <https://www.cosmas.org/store/engineering/competitive-manufacturing>

PHD RESEARCH

- **THESIS TITLE:** Experimental Investigation of Rapeseed Oil Biodiesel on Low Heat Rejection Exhaust Gas Recirculated Diesel Engine.
- **RESEARCH DOMAIN:** Mechanical Engineering > Internal Combustion Engines > Alternate Fuels > Engine Modifications.
- **RESEARCH DURATION:** Course Work (Jan 2014 – Dec 2014), Experimental Work (Jan 2015 – Dec 2018), Thesis Evaluation (Jan 2019 – Dec 2020), Viva & Post Completion Formalities (Jan 2021 – Nov 2021).
- **SUPERVISOR:** Dr. S. Rajakumar, Assistant Professor, Department of Mechanical Engineering, Regional Office of Anna University, Tirunelveli, Tamilnadu.

SOFTWARE PROFICIENCY

- **Modeling & Analysis Software:** AutoCAD, CATIA, CREO, ANSYS, Open FOAM, Minitab, and MATLAB.

CODING & PROGRAMMING SKILLS

- Significant knowledge with 10+ years of experience in web application design, development & hosting.
- Proficient in Front end languages like HTML, HTML5, CSS & CSS3.
- Proficient in Backend languages like PHP, C# & JS.
- Significant knowledge in database management with skills and experience in MySQL, PostgreSQL & MariaDB.
- Substantial skill & experience in web server setup & management operated with Linux operating systems, Apache / Nginx reverse proxy applications.
- Extensive knowledge in handling public cloud infrastructures like Amazon AWS, Google Cloud, IBM Cloud & Microsoft Azure.
- Public cloud work areas - expertise in Elastic Compute Cloud (EC2), Simple Email Service (SES), Cloud Watch & Simple Notification Service (SNS), Simple Storage Service (S3), Virtual Machine (VM), Snapshots, Images / AMI, Cloud Storage Buckets, Load Balancing, Cloud DNS & Networking.
- Developed & hosted more than 100 websites / web applications / ERP software / CRM software / CMS web applications in the cloud.
- Worked as design / technical on 15+ international conferences organized by various institutions to support website, article submission system, digital marketing, design & application development processes.

SWAYAM / NPTEL MOOC COURSES COMPLETED

Course Name	Offered by	Score	Course Duration
Programming, Data Structures and Algorithms Using Python	Chennai Mathematical Institute	68/100 (Elite)	Jul-Sep 2022
Cloud Computing	IIT Kharagpur	85/100 (Elite, Topper-Top 1%)	Jul-Oct 2022

AICTE FDPs COMPLETED

Course Name	Offered by	Course Duration
5-day Online FDP on the theme "Inculcating Universal Human Values in Technical Education"	All India Council for Technical Education (AICTE)	30th January to 3rd February 2023

PROFESSIONAL MEMBERSHIPS

- Professional Member of **"International Association of Engineers"** (IAENG), Membership ID No: 235454.
- Professional Member of **"Institute of Research Engineers and Doctors"** (theiRED), Membership ID No: AM101000583493.
- Professional Member of **"Institute for Engineering Research and Publication"** (IFERP), Membership ID No: PMIN35749801.
- Professional Member of **"Institute for Science, Engineering & Technology Research"** (ISET RESEARCH), Membership ID No: 2021040062.
- Professional Member of **"Experts of Academic Excellence Research Centre"** (EAE).
- Associate Member of **"Research and Scientific Innovation Society"** (RSIS), Membership ID No: RSIS-MB1118-988.
- Associate Member of **"International Society for Development & Sustainability"** (ISDS), Membership ID No: CAKEE4LRFVxX86xx8eWF.

AREAS OF EXPERTISE

- **ACADEMICS:** Thermodynamics, Thermal Engineering I & II, Heat & Mass Transfer, Gas Dynamics & Jet Propulsion, Automobile Engineering, Power Plant Engineering, Advanced IC Engines, Fluid Mechanics, Refrigeration & Air Conditioning, Aerodynamics, Computational Fluid Dynamics.
- **RESEARCH:** IC Engines, Refrigeration, Solar PV & Thermal, Biofuels, Heat Transfer, Computational Fluid Dynamics.

ACCOLADES

- Received “**Best Paper Award**” from S.A. Engineering College, for publishing a research paper in Fuel-Elsevier Journal with Impact Factor: 5.05, March 2019.
- Received “**Best Paper Award**” from the International Conference on Automobile, Marine and Mechanical Engineering, ICAMME 2018, SVCE Chennai, May 2018.
- Received “**Best Paper Award**” from TRANSIST ONLINE for the paper submitted and presented in International Conference on Recent Innovations in Science and Technology, held on March 2017.
- Received “**Best Teacher Award**” from Rajadhani Institute of Engineering and Technology, Attingal during Teachers Day celebration, September 2016.
- Contributed as “**Designer and Editorial Assistant**” for the National Conference on “**Advances in Mechanical Engineering**”, **NME '2015** conducted by Department of Mechanical Engineering, Regional Office of Anna University, Tirunelveli Region, Tirunelveli.
- Contributed as “**Convenor**” for the National Level Symposium “**Aviopex '14**” conducted by Department of Aeronautical Engineering, Infant Jesus College of Engineering, Tirunelveli.
- Awarded “**Gold Medal**” for highest **CGPA** on the Institution for the batch of 2012 by Adhiparasakthi Engineering College, Melmaruvathur.
- Contributed as “**Designer and Editorial Assistant**” for the National Level Technical Conference on “**Recent Research in Mechanical Engineering**”, **RRME '12** conducted by Department of Mechanical Engineering, Adhiparasakthi Engineering College, Melmaruvathur.
- Contributed as “**Designer and Editorial Assistant**” for the National Level Technical Conference on “**Recent Research in Mechanical Engineering**”, **RRME '11** conducted by Department of Mechanical Engineering, Adhiparasakthi Engineering College, Melmaruvathur.
- Awarded “**Best Outgoing Student of Aeronautical Department**” for the batch 2005-2009 by Infant Jesus College of Engineering, Tirunelveli.
- Contributed as “**Designer and Coordinator**” for the National Level Technical Symposium and Expo on “**Aviopex '09**” conducted by Department of Aeronautical Engineering, Infant Jesus College of Engineering, Tirunelveli.

WORK EXPERIENCE

- Presently working as **Assistant Professor** in Mechanical Department at **Madanapalle Institute of Technology & Science**, Madanapalle from February 2022 onwards (1 Years 9 Months). (C: 12 Years 7 Months)
- Worked as **Assistant Professor** in Mechanical Department at **S.A. Engineering College**, Chennai from **December 2017 – February 2022** (4 Years 3 Months). (C: 10 Years 10 Months)

- Worked as **Assistant Professor** in Mechanical Department at **Sree Sastha Institute of Engineering and Technology**, Chennai from **June 2017 – December 2017** (7 Months). (C: 6 Years 7 Months)
- Worked as **Assistant Professor** in Mechanical Department at **Satyam College of Engineering and Technology**, Nagercoil from **June 2015 – May 2017** (2 Years). (C: 6 Years)
- Worked as **Teaching Fellow** in Mechanical Department at **Regional Centre of Anna University**, Tirunelveli from **August 2014 – May 2015** (9 Months). (C: 4 Years)
- Worked as **Project Assistant** in Fabrication Division at **Pantech ProEd**, Tirunelveli from **May 2014 – August 2014** (3 Months). (C: 3 Years 3 Months)
- Worked as **Assistant Professor** in Aeronautical Department at **Infant Jesus College of Engineering**, Tirunelveli during the year **June 2012 – May 2014** (2 Years). (C: 3 Years)
- Worked as **Lecturer** in Aeronautical Department at **Infant Jesus College of Engineering**, Tirunelveli during the year **June 2009 – May 2010** (1 Year). (C: 1 Year)

Total Experience: **12 Years & 7 Months**

PAST ACADEMIC / INSTITUTIONAL ROLES & RESPONSIBILITIES

- Acted as class advisor for 6 batches of students.
- Worked as Exam Cell Coordinator for Mechanical Engineering Department for 3 years.
- Worked as IQAC coordinator for institution for 2 years.
- Worked as Developer & IT admin to manage Google Workspace, Microsoft Office 365, Institution Website, Institution social media pages (Facebook, Instagram & YouTube), Live streaming all college level events on YouTube etc.,
- Worked as criteria head for NBA criteria 1,3 & 4.
- Acted as lab in charge for Thermal Engineering laboratory for 3 years.
- Acting presently as Academic Coordinator in Mechanical Engineering Department and handling Board of Studies (BoS), IAAB (Industry Alumni Advisory Board) & PAC (Programme Assessment Committee) responsibilities.
- Experience in handling timetables, subject allocation, students' feedback, AICTE 360 feedback & multiple department level administrative support.

PERSONAL PROFILE

Name : **Dr. Anantha Raman L.**
Qualification : **Ph.D. Thermal Engineering, M.E., Thermal Engineering, B.E., Aeronautical Engineering.**
Date of Birth : **10th, September 1988.**
Gender : **Male.**
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Contact No. : **+91 90033 14466**
E-mail ID : **raman3366@gmail.com**
Hometown : **Sathanoor, Vandavasi Taluk, Tiruvannamalai Dt.**
State : **Tamil Nadu.**
Country : **India.**
Languages Known : **English (RWS), Tamil (RWS), Telugu (S) & Malayalam (S).**
Live DNA : **livedna.net/?dna=91.36643**
SCI Profile : **sciprofiles.com/profile/drar**
ORCID ID : **orcid.org/0000-0003-3465-286X**
VIDWAN : **vidwan.inflibnet.ac.in/profile/272798**
WEB OF SCIENCE : **webofscience.com/wos/author/record/P-3038-2018**
SCOPUS : **scopus.com/authid/detail.uri?authorId=54392375300**
Google Scholar : **scholar.google.com/citations?user=NCnLwKsAAAAJ&hl**
Research Gate : **researchgate.net/profile/Anantha-Raman-Lakshmipathi**

Declaration

I hereby conclude that the above-mentioned information is true to the best of my knowledge and conscience.

Place : Madanapalle.

Date : 20-10-2023.



[Dr. ANANTHA RAMAN L.]