

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

## **PUBLICATIONS**

Total Publications: **22**.

International Journals: **23** | National Journals: **02**.

WOS/SCI/SCIE: **6** | SCOPUS: **5** | UGC / Google Scholar: **14**.

SCOPUS h-index: **6** | SCOPUS Total Citations: **386**.

Google Scholar h-index: **5** | i10-index: **4** | Google Scholar Total Citations: **388**.

## **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](https://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:**

"Design and Implementation of an IoT-Enabled Medication Delivery Robot for Isolated Patient Care", IEEE Xplore, 2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS) - 23-25 Oct. 2024, doi: 10.1109/ICSSAS64001.2024.10760515

"AI-based Prognostic Analysis of NOx Emission from Industrial Diesel Engine for Feedback Control System", IEEE Xplore, 2023 1st International Conference on Optimization Techniques for Learning (ICOTL), Feb 2024, doi: 10.1109/ICOTL59758.2023.10435308

"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.

## **PATENTS**

Patents Filed: **14** | Patents Published: **2** | Patents Granted: **12**.

Title of Invention: **AUTONOMOUS MOBILE-CONTROLLED ROBOT FOR WATERWAY WASTE**; Design number: 427760-001; Publication Date: 06/01/2025; Role: Inventor; Published in: The Patent Office - Registration of Design.

Title of Invention: **PORTABLE THERMOELECTRIC AIR CONDITIONING SYSTEM**; Design number: 427760-001; Publication Date: 03/10/2024; Role: Inventor; Published in: The Patent Office - Registration of Design.

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: **3**

Book Title: **INTRODUCTION TO HEAT TRANSFER**; Published on: 28-06-2024; Published by: COSMAS Scientific Publications; ISBN: 978-93-6096-435-1; Online Link: <https://cosmas.org/store/engineering/introduction-to-heat-transfer/>

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](https://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, PYTHON, 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
Introduction to Internet of Things	IIT Kharagpur	91/100 (Elite, Topper-Top 2%)	Jul-Oct 2024

## AICTE FDPs COMPLETED

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

## PROFESSIONAL MEMBERSHIPS

- Life Member of **"Indian Society for Technical Education"** (ISTE), Membership ID No: LM140834
- 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 (3 Years). (C: 13 Years 10 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: **13 Years & 10 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 Head & NBA Coordinator in Mechanical Engineering Department and handling Board of Studies (BoS), IAAB (Industry Alumni Advisory Board) & PAC (Programme Assessment Committee) responsibilities.
- Experience in NBA (All Criteria), handling timetables, subject allocation, students' feedback, AICTE 360 feedback & multiple department level administrative files & support.

## PERSONAL PROFILE

Name : **Dr. Anantha Raman L.**  
Qualification : **Ph.D. Thermal Engineering, M.E., Thermal Engineering, B.E., Aeronautical Engineering.**  
Date of Birth : **10 September 1988.**  
Gender : **Male.**  
Nationality : **Indian.**  
Contact No. : **+91 90033 14466**  
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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**  
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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** : Sathanoor.

**Date** : 07-02-2025.



[ Dr. ANANTHA RAMAN L. ]