


**SRI SAI RAM ENGINEERING COLLEGE**  
**DEPARTMENT OF MECHANICAL ENGINEERING**

Name: <b>S.KRISHNARAJ</b>	
Designation:	ASSISTANT PROFESSOR
Qualification:	M.E. (P.hD)
Area of Specialization:	COMPUTER AIDED DESIGN
Experience:	Teaching- 14 YEARS & 5 MONTHS
	Industry – 6 Months
Number of Workshops/ Conferences/ FDP Attended:	WORKSHOP- 05 NATIONAL/INT. CONFERENCE- 04
Publication:	Journal:  National: 1  <b>International : 17</b>
	Conference:  National: 1 <b>International: 3</b>
General:	1. Department Internship Coordinator 2. Department M – Baja Coordinator (2017 to Till date) 3. Student counselor.
Staff Achievement	1. Faculty Coordinator of SAE (BAJA) and The Rocketeer Racing Team won two awards, First Position in Design & CAE Event (Static Event) with a Cash Prize of Rs.20, 000 and Second Position in in Rock Climb (Dynamic Event) (2020-21), FMAE, Hyderabad.  2. Aerodynamic Analysis of Hybrid Drone, adjudged for the outstanding Paper Award in the First International Conference on Robotics, Intelligent Automation and Control Technologies (RIACT

	<p>2020) organized by School of Mechanical Engineering, Vellore Institute of Technology, Chennai on 2nd and 3rd October 2020.</p> <p>3. Faculty Coordinator of SAE (BAJA) and The Rocketeer Racing Team won an award in Sales and Marketing with a cash prize of Rs.50,000 (2019-20), Natrip, Pithampur, Indore.</p> <p>4. Faculty Coordinator of SAE (BAJA) and The Rocketeer Racing Team won third place with a cash prize of Rs.12,500 Pre-Virtual BAJA competition   Skill-Lync (2019-2020).</p> <p>5. Faculty Coordinator of SAE (BAJA) and The Rocketeer Racing Team won two awards in Sales and Marketing and Go - Green with a cash prize of Rs.80,000 (2017-18), IIT Ropar.</p> <p>6. Produced 100% results in Industrial Robotics, Engineering Economics &amp; Cost Estimation, Engineering Economics &amp; Advanced Material Science.</p>
--	--

### **ACADEMIC BACKGROUND:**

Course	Institution	Year of Passing	Board/University	Percentage of marks (%)
M.E (CAD)	Hindustan College of Engineering , Padur, Chennai.	2007	Anna University	77
B.E (Mechanical Engineering)	I.F.E.T College of Engineering, Villupuram, Tamilnadu.	2005	Anna University	72
Higher Secondary	Don Bosco Higher Secondary School, Pondicherry	2001	State board	69
S.S.L.C	Petit Seminaire Higher Secondary School, Pondicherry.	1999	State board	63

**PROFESSIONAL EXPERIENCE:**

Sl. No	College/Organization	Designation	Period From To	Total period	Nature of work
1.	Sri Sairam Engineering College, West Tambaram, Chennai.	Asst.Prof	12.06.2014 - Till Date	7 Yrs & 8 Months	Teaching and guiding UG, PG projects
2.	Sri Manakula Vinayagar Engineering College Madagadipet, Puducherry.	Asst.Prof	June 2012 – April 2014	1 Yr & 10 Months	Teaching and guiding UG, PG projects
3.	Sree Sastha Institute of Engineering and Technology, Chembrampakkam, Chennai.	Asst.Prof	June 2009 – May 2012	1 Yr & 11 Months	Teaching and guiding UG, PG projects
4.	I.F.E.T College of Engineering, Villupuram.	Lecturer	June – 2008 - May 2009	11 Months	Teaching and guiding UG, PG projects
5.	Hindustan College of Engineering, Padur, Chennai.	Lecturer	June 2007 – May 2008	11 Months	Teaching and guiding UG, PG projects

**PROFESSIONAL INVOLVEMENT:**

<b>Membership of professional bodies</b>	<ol style="list-style-type: none"> <li>1. Faculty member in SAE, IEEE, ISTE Faculty Coordinator For Sae M-Baja Since 2016 Organized By Sae India Northern Section.</li> <li>2. EdX engine Value Added Course Coordinator - Product Design Formula and Internal Combustion Engines Using CFD.</li> </ol>
--	---

**International Conferences Attended: 04**

1. Krishnaraj S, Senthikumar R, Gokula Krishnan A, Ganeshkumar G, Mohan M, Nirmal M, Aerodynamic Analysis of Hybrid Drone, First International Conference on Robotics, Intelligent Automation and Control Technologies (RIACT 2020) organized by School of Mechanical Engineering, Vellore Institute of Technology, Chennai on 2nd and 3rd October 2020.
2. Rajendra Prasad A, Krishnaraj S. Ramachandran S, Vasudevan N, Suresh SM, An Approach To the Development of a Green energy farm using Free flow Horizontal Axis Water turbine, International Conference on Mechanical and Manufacturing Systems (Feb 24 th - 25 th ) 2016, West Tambaram, Chennai, India.

3. R. Ashok Gandhi, S. Krishnaraj, V. Raviraj, S. Ganapathy and S. Ramachandran, Development and Field Trials of Ultra Low Wind Speed Vertical Axis Wind Turbine, International Conference on Mechanical and Manufacturing Systems (Feb 24 th - 25 th ) 2016, West Tambaram, Chennai, India.
4. S. Krishnaraj, On-Line Monitoring of Wear (Flank) in Single Point Cutting Tool Using Ultrasonic Technique, International Conference on Mechanical and Manufacturing Systems (Feb 24 th - 25 th ) 2016, West Tambaram, Chennai, India.

#### **Papers Published in the International Conferences : 05**

1. Krishnaraj S, Senthikumar R, Gokula Krishnan A, Ganeshkumar G, Mohan M, Nirmal M, Aerodynamic Analysis of Hybrid Drone, First International Conference on Robotics, Intelligent Automation and Control Technologies (RIACT 2020) organized by School of Mechanical Engineering, Vellore Institute of Technology, Chennai on 2nd and 3rd October 2020.
2. S. Krishnaraj a,\*, S. Deshik Sandeep b , R. Poovarasan c , D. Magesh d , K.V. Ajay Sooria e and, R. Kiran, Design and Fabrication of Casuarina Harvesting Machine, International Conference on Processing of Materials, Minerals and Energy (July 29th – 30th) 2016, Ongole, Andhra Pradesh, India.
3. Rajendra Prasad A, Krishnaraj S. Ramachandran S, Vasudevan N, Suresh SM, An Approach To the Development of a Green energy farm using Free flow Horizontal Axis Water turbine, International Conference on Mechanical and Manufacturing Systems (Feb 24 th - 25 th ) 2016, West Tambaram, Chennai, India.
4. R. Ashok Gandhi, S. Krishnaraj, V. Raviraj, S. Ganapathy and S. Ramachandran, Development and Field Trials of Ultra Low Wind Speed Vertical Axis Wind Turbine, International Conference on Mechanical and Manufacturing Systems (Feb 24 th - 25 th ) 2016, West Tambaram, Chennai, India.
5. S. Krishnaraj, On-Line Monitoring of Wear (Flank) in Single Point Cutting Tool Using Ultrasonic Technique, International Conference on Mechanical and Manufacturing Systems (Feb 24 th - 25 th ) 2016, West Tambaram, Chennai, India.

#### **Short Term Course (Refresher courses) Attended:**

#### **Faculty/Staff Development /Training Program (Orientation programmes) Attended: 15**

1. S. Krishnaraj, Participated in the One Week Virtual “AICTE Training and Learning (ATAL) Academy Online FDP on Consulting: Building a Vibrant Industry – Academia Ecosystem” Conducted by Prin. I.N Welingkar Institute of Management Development and Research, Bengaluru, from 26.07.2021 to 30.07.2021.

2. S.Krishnaraj, Participated in the One Week Virtual “**AICTE Training and Learning (ATAL) Academy Online FDP on Teaching Learning Using MATLAB**” Conducted by Guru Ghasidas Vishwavidyalaya, from 24.11.2020 to 28.11.2020.
3. S.Krishnaraj, Participated in the One Week Virtual “**AICTE Training and Learning (ATAL) Academy Online FDP on Robotics**” Conducted by Rajiv Gandhi Proudhyogiki Vishwavidyalay, from 03.11.2020 to 07.11.2020.
4. S.Krishnaraj, Participated in the 12 Hours Virtual “**ICT Academy Online FDP on Product Design and Drafting using CATIA V5**” Conducted by ICT Academy, from 17.11.2020 to 23.11.2020.
5. S.Krishnaraj, Participated in the 6 Days Virtual “**Faculty Development Program on Robotics and Automation**” Conducted by School of Mechanical Engineering, Vellore Institute of Technology Chennai, from July 13,2020 to July 18,2020.
6. S.Krishnaraj, Participated in the Online AICTE Recognized Faculty Development Programme on “**Computer Integrated Manufacturing & CNC (CIM/CNC)**”, 25-05-20 to 29-05-20 (One Week) Organized by Mechanical Engineering Department NITTTR, Chandigarh.
7. S.Krishnaraj, Participated in the Online AICTE Recognized Faculty Development Programme on “**Modeling and Simulation using MATLAB**”, 18-05-20 to 22-05-20 (One Week) Organized by Mechanical Engineering Department NITTTR, Chandigarh.
8. S.Krishnaraj, Participated in the Online AICTE Recognized Faculty Development Programme on “**Computer Aided Design and Manufacturing (CAD/CAM)**”, 27-04-20 to 01-05-20 (One Week) Organized by Mechanical Engineering Department NITTTR, Chandigarh.
9. S.Krishnaraj, Participated in the Online AICTE Recognized Faculty Development Programme on “**Environment and Sustainable Development**”, 20-04-20 to 24-04-20 (One Week) Organized by Rural Development Department NITTTR, Chandigarh.
10. S.Krishnaraj, “**Autodesk Inventor - ICT Academy**”, Sri Sairam Institute of Technology, Chennai, June 2018.
11. S.Krishnaraj, “**KRT Design Competition Aided Engineering - Finite Element Analysis (CAD - FEA)**”, Sri Sairam Engineering College, Chennai, Feb 2018.
12. S.Krishnaraj, “**BAJA SAEINDIA 2017**”, Sri Sairam Engineering College, Chennai, Feb 2017.
13. S.Krishnaraj, “**Automotive Technology, Goodwin Motors**”, Sri Sairam Engineering College, Chennai, September 2017.
14. S.Krishnaraj, “**Value Engineering using ANSYS**”, Sri Sairam Engineering College, Chennai, August 2016.

15. S.Krishnaraj, " **Computer Aided Design and Usage of Software** ", Sri Sairam Engineering College, Chennai, August 2016.
16. S.Krishnaraj, " **Computer Aided Design** ", Vel tech Multi tech Dr.RR DR.SR Engineering college, Chennai, June 2015.
17. S.Krishnaraj, " **Quality Management System and Audit Training** ", Sri Sairam Engineering College, Chennai, October 2014.
18. S.Krishnaraj, " **Industry - Institution Interaction Event on ENVIRONMENT MANAGEMENT IN INDUSTRIAL SECTORS - STATUS AND NEEDS**", Sri Sairam Engineering College, Chennai, July 2014.
19. S.Krishnaraj, " **First Aid and Fire Safety**", Sri Sairam Engineering College, Chennai, August 2014.
20. S.Krishnaraj, "**Funded Projects**", I.F.E.T College Of Engineering, April 2009.
21. S.Krishnaraj, "**Orientation Program for Fresh Teachers**", Hindustan College Of Engineering, June 2008.
22. S.Krishnaraj, "**Motivation for Creativity**", I.F.E.T College of Engineering, June 2008.
23. S.Krishnaraj, "**Soft Skills and Class Room Dynamics**", Hindustan College Of Engineering, Dec 2007.

#### **Resource person In FDP: 02**

1. S.Krishnaraj, Sri Sairam Engineering College, "Approved Teacher and Final Exam Supervisor of the International Astronomy and Astrophysics Competition 2021".
2. S.Krishnaraj, Sri Sairam Engineering College, "On line Guest Lecture on Learning Curves on All Terrain Vehicles" Tagore Engineering College, Chennai, 29<sup>th</sup> October 2021.
3. S.Krishnaraj, Sri Sairam Engineering College, "Fresher's AICTE Induction Programme" SRM Valliammai Engineering College, Chennai, 16<sup>th</sup> November 2020 to 20.11.2020.
4. S.Krishnaraj , Sri Sairam Engineering College, S2T Webinar Series No:3 "**E-Vehicle & Solaris**", 17<sup>th</sup> April 2020.
5. S.Krishnaraj, " **Computer Aided Design and Usae of Software**", Sri Sairam Engineering College, Chennai, August 2016.

#### **Workshops Attended : 05**

1. S.Krishnaraj, Sri Sairam Engineering College in two days online workshop on " **Fuzzy Logic and Neural Network Approaches for Engineering Solutions**" Organized by Journal of Advanced Engineering Research & Powered by Hexacube India, on 3<sup>rd</sup> and 4<sup>th</sup>

May 2020.

2. S.Krishnaraj, Sri Sairam Engineering College in three days online workshop on "**Design of Experiments: An Engineering Perspective**" Organized by Journal of Advanced Engineering Research & Powered by Hexacube India, on 25<sup>th</sup>, 26<sup>th</sup> & 27<sup>th</sup> April 2020.
3. S.Krishnaraj, "**Solar Radiation Resource Assesment, NIWE and Iacharya Silicon Limited (ISL)** ", Sri Sairam Engineering College, Chennai, Dec 2016.
4. S.Krishnaraj, "**Role of Lean Manufacturing on Organization Competitiveness**", Sri Sairam Engineering College, Chennai, August 2014.
5. S.Krishnaraj, "**Recent Trends and Developments in Engine Management Systems and Alternate Fuels**", Mit, Anna University, Chennai, March 2010.

#### **Events organized: 06**

S.Krishnaraj, Sri Sairam Engineering College, Organized a Six Days Hands on Training on "**Retrofitting of Fuel Car into Electric Car** " from 22.03.2021 to 27.03.2021.

S.Krishnaraj, Sri Sairam Engineering College, Organized a Lecture Meeting on "**Disruptions in Transportations Industry**" 08.08.2020, Sponsored by Rotary Club of Madras, Porur.

S.Krishnaraj, Sri Sairam Engineering College, Organized a Webinar on "**EIA 2020 An Awareness Program for Faculties & Students**" 04.02.2020, Sponsored by SAEINDIA Collegiate Club.

S.Krishnaraj, Sri Sairam Engineering College, Organized a Five Days FDP on "**Recent Advancements in Manufacturing and Management**" from 31.08.2020 to 04.09.2020, Sponsored by AICTE Training and Learning (ATAL) Academy.

S.Krishnaraj, Sri Sairam Engineering College, Organized a two weeks online refresher Course on "**Advancement in Mechanical, Production & Civil Engineering and ICT in Teaching – Learning Process**" from 13.05.2020 to 26.05.2020.

S.Krishnaraj, Sri Sairam Engineering College, Organized a Webinar on "**Writing R&D Proposals for Faculties**", 12.06.2020.

#### **Funded Projects:**

1. Automotive - Lathe Operator of Grant-in-Aid for the academic year 2018-19 to Sri Sai Ram Engineering College, Kanchipuram, Tamil Nadu under the Pradhan Mantri Kaushal Vikas Yojana for Technical Institutes (PMKVY-TI) during the financial year 2019-20. (F. No. 5-8/PMKVY-TI/2018-19/SRO/1-3516176364).
2. Development of a Green Energy Farm by Designing and Developing Shrouded Hydrofoil Horizontal Axis Hydrokinetic Water Turbines. (File No.DST/TSG/NTS/2013/89).

### **List of publications in international journals:**

1. R.Senthil Kumar, S Krishnaraj, Ajay Kumar, B Murali, T Subathra, Optimization of One Way Tesla Valve, SAE Technical Paper, 2021-28-0250, 2021/10/1.
2. Godala Shaikshavali, M Murali Mohan, G Praveen Kumar Yadav, S Krishnaraj, L Girisha, Ram Subbiah, Analysis of parametric effect on domex steel using plasma arc Machining process, Materials Today: Proceedings, 2021/2/26.
3. A Damodar Reddy, PN Karthikeyan, S Krishnaraj, Adarsh Ajayan, K Sunil Kumar Reddy, Ram Subbiah, Analysis and optimization of hot extrusion process on strenx steel 900, Materials Today: Proceedings, Vol. 47, pp-4177-4180, 2021/1/1.
4. S Krishnaraj, R Senthil Kumar, A Gokula Krishnan, G Ganeshkumar, M Mohan, M Nirmal, Aerodynamic Analysis of Hybrid Drone, IOP Conference Series: Materials Science and Engineering, Vol. 1012, Issue.1, pp 012023, 2021.
5. S. Krishnaraj a,\*, S. Deshik Sandeep b , R. Poovarasana c , D. Magesh d , K.V. Ajay Sooria e and, R. Kiran, Design and Fabrication of Casuarina Harvesting Machine, Materials Today: Proceedings 5 (2018) 1800–1806.
6. Rajendra Prasad A, Krishnaraj S. Ramachandran S, Vasudevan N, Suresh SM, An Approach To the Development of a Green energy farm using Free flow Horizontal Axis Water turbine, International journal of Mechanical engineering and technology 2017, Vol 8 , PP 25-36
7. R. Ashok Gandhi, S. Krishnaraj, V. Raviraj, S. Ganapathy and S. Ramachandran, Development and Field Trials of Ultra Low Wind Speed Vertical Axis Wind Turbine (VWAT) for Home Application, Indian Journal of Science and Technology, Vol 9(S1), DOI: 10.17485/ijst/2016/v9iS1/108479, December 2016.
8. S K Dinesh Kumar 1, a\* R Selvanayagam 2,b M Sivakumar3, c S Krishnaraj4, d , A Study on Working Process of Wire-EDM by Using Two Different Dielectric Fluids on HCHCr Alloy Steel, Applied Mechanics and Materials, ISSN: 1662-7482, Vol. 852, pp 212-217.
9. S. Ganapathy and S. Ramachandran R. Ashok Gandhi, S. Krishnaraj, V. Raviraj, Development and Field Trials of Ultra Low Wind Speed Vertical Axis Wind Turbine (VWAT) for Home Application, Indian Journal of Science and Technology, Vol.9, Issue.S1, pp-1-5, 2016/12.
10. S Krishnaraj, V Nidhish, Citha Ranjith, D Jothishankar, Aravindh Tv, T Subathra, RA-Solar Herbal Decoction Extractor, SAE Technical Paper, Issue.2020-28-0448, 2020/9/25.
11. B Navin Mr R Senthil Kumar, Mr.S.Krishnaraj, D Jothishankar, V Nidhish, M Citha Ranjith, Compact Foritos Portable Staircase, Journal of the Gujarath Research Society, Vol.21, Issue.17, pp- 2389-2399, 2019/12/30.
12. Mr.K.Karan Mr.S.Krishnaraj, Mr R Senthil Kumar, Mr S. Siva Chandran, Mr. M.



Sudhakar, Dr. Ravishankar sathyamurthy, Design And Analysis Of Automatic Solar Panel Cleaning System, Journal of the Gujarat Research Society, Vol.21, Issue.17, pp-2400-2408, 2019/12.

13. S.Krishnaraj, A.Ravinthiran, S.Ganapathy, A.G.S.Siddharth, K.Karan, Automatic Solar Panel Tracking System, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol.9, Issue.1, pp- 2278-3075, 2019/11.
14. Anand.R.Iyer R. Senthil Kumar, Krishnaraj.S Vijaya Ramnath.B, Adhitya.R.M, Impact and Hardness Characteristics of Cfrp-Kenaf-Abaca Fiber Composites, International Journal of Recent Technology and Engineering (IJRTE), Vol.8, Issue.4, pp-2277-3878, 2019/11.
15. R. Ganapathy, S., Krishnaraj, S., Aravinth, P., Abdul Rahuman, A., Shanmugam, ALFA: Fly ash - Aluminium metal matrix composites for light weight material, International Journal of Recent Technology and Engineering, Vol.8, Issue.3, pp-2277-3878, 2019/9.
16. Krishnaraj. S Ashwanth Srinath.G, Athithan.E, Bhanu Prasanna.A, Annamalai.V, Solution for stainless steel jar crack beading while usage time, Journal of Emerging Technologies and Innovative Research (JETIR), Vol.6, Issue.6, pp-2349-5162, 2019/6.
17. Balaji S A Rajendra Prasad, N Vasudevan, S Krishnaraj, S M Suresh, Design and Development of Phase Change Material Oriented Cold Storage Flask, IJMET, Vol.9, Issue.8, pp- 204-212, 2018/8.

**NPTEL Courses Completed :**

1. Patent Drafting for Beginners - Jan-Feb 2021
2. Robotics - Jul-Sep 2019
3. Stress Management - Aug-Sep 2018
4. Engineering Economic Analysis - Feb-Mar 2018