CV

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Education

1. Ph. D. in Industrial Robotics from BITS PILANI, Hyderabad Campus, Telangana, India.
2. PG in Artificial Intelligence and Machine Learning from NIT Warangal, Telangana, India.
3. M. Tech in Machine Design from JNTU Hyderabad, Telangana, India.
4. B. Tech. in Mechanical Engineering from JNTU Hyderabad, Telangana, India.

Professional Experience

1. Assistant Professor in Vignan Institute of Technology and Science (affiliated to JNTU Hyderabad), from Aug 2015 to Oct 2017.
2. Junior Research Fellow in DST-SERB Funded Project (PI: Dr. Arshad Javed, File: ECR/2017/000799), from Nov 2017 to Oct 2019.
3. Senior Research Fellow in DST-SERB Funded Project (PI: Dr. Arshad Javed, File: ECR/2017/000799), from Nov 2019 to Oct 2020.
4. Teaching Assistant in BITS PILANI, Hyderabad Campus, from Jan 2018 to Present
5. Lab Instructor (Mechanism and Robotics) in BITS PILANI, WILP, from Jan 2018 to Present

List of Publications

SCI/SCIE Indexed:

1. Srinivas, G. L., & Javed, A. (2020). **Topology optimization of rigid-links for industrial manipulator considering dynamic loading conditions**. *Mechanism and Machine Theory*, 153, 103979. DOI: 10.1016/j.mechmachtheory.2020.103979 (SCI; IF=3.3)
2. Srinivas, G. L., & Javed, A. (2021). **Synthesis and performance evaluation of manipulator-link using improved weighted density matrix approach with topology optimization method.** *Engineering Science and Technology an International Journal*. DOI: 10.1016/j.jestch.2021.02.010 (SCIE; IF=3.2)
3. Srinivas, G. L., & Javed, A. (2021). **A novel method to synthesize the single topology for dynamically loaded members.** *Journal of Mechanical Science and Technology*. DOI: 10.1007/s12206-021-0319-4 (SCIE; IF=1.8)
4. Srinivas, G. L., Aaditya, G., Surya, P., & Javed, A. (2021). **Energy efficiency of SCORBOT ER-4U manipulator using topology optimization method**. *Mechanics Based Design of Structures and Machines*. (Revisions submitted)

Book Chapters:

1. Srinivas, G. L., & Javed, A. (2019). **Numerical Simulation and Experimental Study on Lightweight Mechanical Member.** *In Advanced Engineering Optimization through Intelligent Techniques* (pp. 631-641). Springer, Singapore. DOI: 10.1007/978-981-13-8196-6_55
2. Srinivas, G. L., & Javed, A. (2021). **Topology Refinement from Design to Manufacturing using Image Processing Based Filtration Techniques.** *In Machines, Mechanism and Robotics*. DOI: 10.1007/978-981-16-0550-5
3. Srinivas, G. L., & Javed, A. (2021). **Multi-body topology Optimization of connecting rod using Equivalent static load method.** *In Lecture Notes in Mechanical Engineering*. DOI: 10.1007/978-981-16-1769-0

SCOPUS Indexed:

1. Srinivas, G. L., & Javed, A. (2019). **Topology optimization of industrial manipulator-link considering dynamic loading**. *In materialstoday proceedings*, science direct, 18, (pp. 3717-3725). DOI: 10.1016/j.matpr.2019.07.306
2. Srinivas, G. L., & Javed, A. (2020). **Numerical evaluation of topologically optimized ribs for mechanical components**. *Materials Today: Proceedings.* Doi: 10.1016/j.matpr.2019.12.292
3. Srinivas, G. L., Singh, S. P., & Javed, A. (2020). **Experimental evaluation of topologically optimized manipulator-link using PLC and HMI based control system**. *Materials Today: Proceedings.* DOI: 10.1016/j.matpr.2020.08.023
4. Srinivas, G. L., & Javed, A. (2020). **Optimization approaches of industrial serial manipulators to improve energy efficiency: A review**. In *IOP Conference Series: Materials Science and Engineering* (Vol. 912, No. 3, p. 032058). IOP Publishing. DOI: 10.1088/1757-899X/912/3/032058
5. Srinivas, G. L., & Javed, A. (2020). **Multi-body dynamic optimization for upper arm of industrial manipulator**. *In AIP Conference Proceedings* (Vol. 2281, No. 1, p. 020022). AIP Publishing LLC. DOI: 10.1063/5.0027965
6. Srinivas, G. L., & Javed, A. (2021). **Topology optimization of KUKA KR16 industrial robot using Equivalent static load method.** In IEEE Conference proceedings (Accepted).

Conference Proceedings:

1. Srinivas, G. L., & Javed, A. (2018). **Topology Optimization of Rotating Mechanical Members**. International Conference on Symposium and Workshop for Analytical Youth in Applied Mechanics *SWAYAM*, BITS Pilani Goa campus,4-6 July 2018.
2. Srinivas, G. L., & Javed, A. (2019). **A Review on Optimization Methods to Enhance Energy Efficiency of Robots**. National Conference on Multidisciplinary Design, Analysis, and Optimization *NCMDAO*, M.S Ramaiah Institute of Technology, Bangalore, 22-23 March 2019.

Patent:

1. Srinivas, G. L., & Javed, A. (2021). **Adaptable 3-DOF industrial manipulator test-rig with link interchangeability for evaluating robot-link performance and energy efficiency** (Patent filed)

Awards:

1. **GATE** is qualified three times in the year **2014, 2015, and 2017** with a score of **501, 371, and 367**, respectively.
2. The presented conference paper at **ICAME 2020**, SRM University is selected for **BEST PAPER AWARD.**
3. The presented conference paper at **iPRoMM 2020**, BITS PILANI is selected for **BEST PAPER AWARD.**
4. The presented conference paper at **IEMTRONICS 2021**, Toronto, CANADA is selected for the **BEST PRESENTER AWARD.**
5. Received certificate of merit as **Topper of the section** during Master of Technology (Machine Design).

Research Profile Web Links:

1. **Google Scholar:** https://scholar.google.co.in/citations?user=tXj5BMMAAAAJ&hl=en&oi=ao
2. **Research Gate:** https://www.researchgate.net/profile/Lakshmi_Srinivas_G
3. **PUBLONS:** https://publons.com/researcher/3693277/lakshmi-srinivas-g/
4. **ORCID:** http://orcid.org/0000-0002-1289-3139