


**SRES', Sanjivani College of Engineering, Kopargaon**  
(An Autonomous Institute affiliated to SPPU, Pune)

**Staff Profile**

<b>Personal Information</b>			
<b>Name of Teaching Staff:</b>	Dr G Vijayakumar		
<b>Designation:</b>	Professor		
<b>Department :</b>	Electrical Engineering		
<b>Date of joining :</b>	15.12.2021		
<b>E Mail ID :</b>	gvijayakumarelect@sanjivani.org.in vijayakumargovind@yahoo.com		
<b>Contact No:</b>	9894386889		
<b>Education Details</b>			
Qualification	Specialization with Class or Grade	University	Year
UG	Electrical and Electronics Engineering (First Class)	Periyar University, Salem	2003
PG	Power Electronics and Drives (First class with Distinction)	Anna University, Chennai	2007
Ph.D	Power Quality	Anna University, Chennai	2014
<b>Total experience in years:</b>			
<b>Teaching:</b>	17		
<b>Industry:</b>	Nil		
<b>Research and Publications</b>			

### INTERNATIONAL JOURNALS(15)

1. Kumarakrishnan V & Vijayakumar G, December 2020, Optimized PSO Technique Based PID Controller for Load Frequency Control of Single Area Power System, Solid State Technology, vol.63, no.5, pp. 7979-7990. (SCOPUS - Impact Factor 0.30) (Pennwell Corporation, United States)
2. Kirubanantham P & Vijayakumar G, February 2020, Novel recommendation system based on long-term composition for adaptive web services, Computational Intelligence, vol.36, no.3, pp. 1063 - 1077. (SCI - IF 1.196) (Wiley, USA)
3. Kirubanantham P & Vijayakumar G, February 2020, Real Time Quality of Service Specific Dynamic Web Service Composition and for Improved Performance of SOA Implicit Explicit Feedback, International Journal of Advanced Science and Technology, vol.29, no.4, pp. 1892 - 1901. (SCOPUS - Impact Factor 0.11)
4. Rajarathinam P & Vijayakumar G, October 2019, An Intelligent Control of Three-Phase Distributed Power Flow Controller for Power Quality Improvement, Journal of Tierarztliche Praxis, vol.39, no.10, pp. 108 - 120. (SCI - Impact Factor 0.14) (Schattauer GmbH, Germany)
5. Suresh P & Vijayakumar G, July 2019, Shunt Active Power Filter with Solar Photovoltaic System for Long-Term Harmonic Mitigation, Journal of Circuits, Systems, and Computers, vol.29, no.5, pp. 1 - 23 (SCI Index – Impact Factor 0.49) (World Scientific Publishers, Singapore)
6. Senthilkumar A, Vijayakumar G & Sathish Kumar S, August 2018, Solar photovoltaic array fed brushless DC motor drive using sensorless technique for reducing vibration with Enhanced DC-DC converter, Journal of Vibro Engineering, vol.20, no.6, pp. 2515 - 2538. (SCI Index – Impact Factor -0.24) (Vibromechanika, Lithuania)
7. Karuppusamy, P & Vijayakumar, G April 2016, Certain Investigation on Multilevel Inverters for Photovoltaic Grid Connected System, Journal of Circuits, Systems, and Computers, vol.25, no.9, pp. 1506 - 12. (SCI Index – Impact Factor -0.49) (World Scientific Publishers, Singapore)
8. Ravi, V, Vijayakumar, G & Karthikeyan, C 2016, Operation of PV System With dc–dc Boost-Fed Shunt Active Filter to Mitigate Current Harmonics and Energy Conservation, Journal of Testing and Evaluation, vol. 44, no. 1, pp. 342 -356. (SCI - Impact factor 0.63) (AMER SOC Testing Materials, USA)
9. Vijayakumar, G & Anita, R 2015, ‘Investigate the performance of photovoltaic based shunt active filter for energy conservation using Icos $\phi$  algorithm’, Australian Journal of Electrical and Electronics Engineering, vol.12, no.1, pp. 29-44. (ESCI Index – Impact factor 0.15) (Taylor and Francis Ltd., United Kingdom)
10. Vijayakumar, G & Anita, R 2015, ‘Photovoltaic based shunt active filter for power quality improvement using icos $\phi$  theory’, Journal of Engineering Science and Technology, vol. 10, no.11, pp. 1422 – 1440. (ESCI – Impact factor 0.53) (Taylor's University, Malaysia)
11. Vijayakumar, G & Anita, R 2014, ‘Optimal Operation of Photovoltaic System with a DC-DC Boost Converter FED SAF Using ICos $\phi$  Algorithm’, Journal of Engineering Science and Technology Review, vol.7, no.3, pp.7-16. (SCOPUS – IF 0.3)( Kavala Institute of Technology, Greece)
12. Vijayakumar, G & Anita, R 2014, ‘Renewable energy interfaced shunt active filter for power quality enhancement using T-Connected transformer ‘, UPB Scientific Bulletin, Series C:

- Electrical Engineering, vol. 76, no. 4, pp. 1-16. (ESCI - IF 0.15) (Politechnica University of Bucharest, Romania)
13. Vijayakumar, G & Anita, R 2014, 'Photovoltaic system with a dc-dc converter fed shunt active filter for power quality improvement using icos-phi algorithm', Journal of Circuits, Systems, and Computers, vol.23, no.9, pp. 132-145. (SCI- IF 0.49) (World Scientific Publishers, Singapore)
  14. Vijayakumar, G, Karthikeyan, C & Ravi, V 2014, 'Novel optimized operation of wind System based shunt active filter To mitigate the current harmonics for energy conservation', Istanbul University - Journal of Electrical and Electronics Engineering, vol. 14, no. 2, pp. 1825 -1835. (Google scholar)
  15. Vijayakumar, G & Anita, R 2013, 'Real time digital simulation of shunt active filter for mitigation of current harmonics with P-Q theory', Academic Journal of Scientific Research and Essays, vol. 8, no. 26, pp. 1239-1251. (Google scholar)(Academic Journal, Nigeria)

### **NATIONAL JOURNALS (16) (Google Scholar)**

1. Jayaprakasam S, & Vijayakumar G, September 2020, An Efficient Analysis of Energy Conservation Audit and Symmetric Measurement for Wide -Area Power System, Seybold Report, vol.15, no.9, pp. 1876 - 1883.
2. Punitha R, Dhinesh V, Saravanan S & Vijayakumar G, August 2020, PV Integrated Highly Efficient Quasi Z - Source Inverter Using Adaptive Neuro Fuzzy Inference System, Seybold Report, vol.15, no.8, pp. 1082 - 1089.
3. Periyasamy V, Surya s, Vasanth K & Vijayakumar G, April 2020, Design and implementation of IoT based modern weaving loom monitoring system, International Journal of Engineering Technology Research & Management, vol.4, no.4, pp. 11 - 18.
4. Harish N, Jayakumar, R, Kaliyarasan, K, Vijayakumar G & Saravanan S, March 2020, IoT based smart home energy meter, International Journal of Engineering Technology Research & Management, vol.4, no.3, pp. 177 - 183.
5. Prakashraj K & Vijayakumar G, February 2020, IoT based energy monitoring and management system for smart home using renewable energy resources, International Research Journal of Engineering and Technology, vol.7, no.2, pp. 1790 - 1797.
6. Dhinesh V & Vijayakumar G, January 2020, A Photovoltaic Modeling module with different Converters for Grid Operations, international journal of innovative research in technology, vol.6, no.8, pp. 89 - 95.
7. Dhinesh, V & Vijayakumar, G 2018, Online Grid Integrated Photovoltaic System With New Level Inverter System, International Journal of Innovative Research in Engineering Science and Technology, vol.6, no.2, pp. 94 - 106.
8. Aravind, T & Vijayakumar, G 2018, Semantic Representation of Data Security for Centralizing Data Storage in Cloud Environment, International Research Journal of Engineering and Technology, vol.5, no.2, pp. 1544 - 1547.
9. Vijayakumar, G & Suresh, P 2017, Control Strategy for A UPQC to Compensate PQ Problems, Journal of Industrial Engineering, vol.1, no.3, pp. 121 - 128.
10. Suresh, P & Vijayakumar, G June 2017, Solar System Based Static Compensator For Power Quality Enhancement Using T-Connected Transformer, Journal of Research in Engineering Technology, vol.2, no.4, pp. 14 - 23.

11. Vijayakumar, G & Kumarakirisnan, V 2017, Design and Implementation of Class EF2 Circuit Based Wireless Power Transfer, journal of CIIT - Wireless Communication, vol.9, no.6, pp. 115 - 118.
12. Suresh, P & Vijayakumar, G & 2017, Novel Control Strategy for a UPQC System to Compensate Power Quality Problems At The Point Of Common Coupling, Journal of Power Electronics and Drives, vol.2, no.2, pp. 549 - 557.
13. Vijayakumar, G & Anita, R 2015, 'Photovoltaic Based Three-Phase Three-Wire SAF for Significant Energy Conservation', International Journal of Electronics and Electrical Engineering, vol. 3, no. 1, pp. 71-79
14. Vijayakumar, G & Soundharya, M 2016, 'Automation in water board using PLC with SCADA', International Journal of Advanced Research in Biology Engineering Science and Technology, vol. 2, no. 10, pp. 1503 -1510.
15. Vijayakumar, G & Anita, R 2013, 'Renewable energy based shunt compensator for power quality improvement', International Journal of Emerging Trends in Electrical and Electronics, vol. 9,no. 1,pp. 1-8.
16. Vijayakumar, G & Anita, R 2013,'Renewable energy interfaced shunt active power filter using a pi controller based ant colony and swarm optimization algorithms', Australian Journal of Basic and Applied Sciences, vol. 7, no. 8, pp. 110-119.

**Papers presented in conferences:**

**INTERNATIONAL CONFERENCES (07)**

1. Vijayakumar, G. "A seed sewing machine for zero till farming", International conference on Advanced science and engineer organized by Al-Ameen Engineering college, 23th March 2019.
2. Vijayakumar, G. "Blockchain enabled smart grid transmission system", International conference on Information Sciences and Renewable Energy Sources organized by Selvam College of Technology, Namakkal, 7th & 8th March 2019.
3. Vijayakumar, G. "IoT based Energy Monitoring and Management system for smart home", International conference on future technologies in engineer, science and humanities organized by Sri Guru Institute of Technology, 22th February 2019.
4. Vijayakumar, G. "control strategy of wind turbine based on permanent magnet synchronous generator and energy storage for standalone systems", International conference on innovation in science engineering and technology for sustainable development sponsored by DST SERB and organized by Muthayammal Engineering college, 30th & 31st March 2018.
5. Vijayakumar, G. "Automation in water board using PLC with SCADA", International conference in global innovations in computing technology organized by Jay shriram group of institutions, 4th & 5th March 2016.
6. Vijayakumar, G. "Tongue segmentation using GVF method", International conference in synergistic evolutions in engineering organized by Surya Engineering College, 4th & 5th March 2015.
7. Vijayakumar, G. "Particle swarm optimization based MPPT for PV system under partial shading conditions", International conference on engineering technology and science organized by Muthayammal college of Engineering, 10th & 11th February 2014.

### NATIONAL CONFERENCES (15)

1. Vijayakumar, G. "An ANFIS control of three phase DPFC for power quality improvement", in National e-Conference on Emerging trends in renewable energy, organized by Dhirajlal Gandhi College of Technology, Salem, 24th April 2020.
2. Vijayakumar, G. "Fuel tank guard", Emerging trends in renewable energy, power quality & optimization techniques organized by Er.Perumal manimekalai college of engineering, Hosur, 25th February 2019.
3. Vijayakumar, G. "A novel control strategy for hybrid wind system for standalone system", National conference on recent trends in electrical engineering and technology organized by Muthayammal Engineering college, 28th March 2018.
4. Vijayakumar, G. "Renewable energy integrated battery charger for distributed power system", National conference on emerging trends in renewable energy power quality & optimization techniques, organized by Er.Perumal manimekalai college of engineering, 5th March 2018.
5. Vijayakumar, G. "Automated water distribution network using PLC with SCADA", National conference on cutting edge technologies in power conversion & industrial drives organized by Bannari Amman Institute of Technology, 18TH-19TH Mar-2016.
6. Vijayakumar, G. "Implementation of particle swarm optimization based MPPT for PV system under partial shading conditions", National conference on trends in automotive parts systems and applications, organized by SAEINDIA SKCET, 21st-22nd March 2014.
7. Vijayakumar, G. (2013), "A STATCOM control scheme for grid connected hybrid wind solar energy system to improve power quality", National conference on emerging trends in technology and management organized by Sobhasaria group of institutions, Sikar Rajasthan, 9th March, 2013.
8. Vijayakumar, G. "A STATCOM control scheme for grid connected hybrid renewable energy systems to improve power quality", National conference on emerging trends in electrical science organized by Institute of Road and Transport Technology, 27th & 28th February 12, 2013.
9. Vijayakumar, G. "A comparative study between two control strategies for shunt active filter", National conference recent advancements & challenges in electrical engineering and application organized by Institute of Road and Transport Technology, 29th February to 1st March 2012.
10. Vijayakumar, G. "Fuzzy controller based hybrid filter for energy saving", National conference on communication technology intervention for rural and social development nctird-2012, organized by Sri Krishna College of Engineering and Technology, Coimbatore, 16th to 17th February 2012.
11. Vijayakumar, G. "A new technology for power factor correction in ac/dc converters", National conference on advance in information and communication technology organized by C.Abdul Hakeem College of Engineering and Technology, Vellore 5th March 2011.
12. Vijayakumar, G. "Shunt active filter to compensate current harmonics", National conference on innovative in electrical, electronics and control systems organized by Kumaraguru College of Technology, 27th & 28th April 2007.
13. Vijayakumar, G. "Control technique for shunt active filter to compensate current harmonics", National conference on innovative strategies on power systems and power electronics drives organized by Sona College of Technology, 16th March 2007.

14. Vijayakumar, G. “Control technique for shunt active filter to compensate current harmonics”, National conference on cutting edge technologies in power conversion and industrial drives organized by Bannari Amman Institute of Technology, Sathyamangalam, 16th & 17th February 2007.
15. Vijayakumar, G. “Zero voltage and zero current switched pwm dc-dc converter using active snubber”, National conference on cutting edge technologies in power conversion and industrial drives organized by Bannari Amman Institute of Technology, 24th & 25th March 2006.

### Research Profile URL

<b>Google Scholar</b>	<a href="https://scholar.google.co.in/citations?user=ZFuPtqAAAAAJ&amp;hl=en">https://scholar.google.co.in/citations?user=ZFuPtqAAAAAJ&amp;hl=en</a>
<b>Scopus</b>	<a href="https://www.scopus.com/authid/detail.uri?authorId=57211970294">https://www.scopus.com/authid/detail.uri?authorId=57211970294</a>
<b>Orcid</b>	<a href="https://orcid.org/0000-0003-1412-9879">https://orcid.org/0000-0003-1412-9879</a>

### Other Research Details

<b>Ph D Guide ? Give field &amp; University:</b>	<b>Power Quality Anna University, Chennai</b>
<b>Ph Ds/ Projects Guided:</b>	<b>9 Scholars (4 Scholars Pursing and 5 Scholars completed)</b>
<b>Books Published</b>	<b>1 (Electrical Machines I)</b>
<b>IPRs/Patents</b>	<b>3 Patents Published (202141012061, 202041011068 &amp; 201841025036A)</b>
<b>Professional Memberships:</b>	<b>IE(I), ISTE &amp; IAENG</b>
<b>Interaction with professional institutions</b>	<b>NIT, Trichy NIT, Calicut IITDM, Chennai CIT,Coimbatore</b>

### Consultancy Activities

<b>Duration</b>	<b>Title of Activity</b>	<b>Issued Organization</b>	<b>Amount</b>
<b>2018-2019</b>	<b>Power loom Automation</b>	<b>Shiri Sivanantha Exports, Salem, Tamilnadu</b>	<b>200000</b>

### Grants fetched

<b>Duration</b>	<b>Title</b>	<b>Issued Organization</b>	<b>Amount</b>
2018-2019	Pedagogy Skills For Teacher in Engineering Education Using ICT	AICTE STTP	500000
<b>Awards</b>			
<b>Best Mentor award for active participation in smart Indian Hackathon Contest</b>			
<b>FACULTY DEVELOPMENT PROGRAMMES ATTENDED</b>			
<b>Name of the FDP / Workshop</b>	<b>Organization</b>	<b>Duration</b>	<b>Month-Year</b>
FDP on Recent trends and research perspective on energy and power system	PSN college of engineering and technology, Tirunelveli	7 Days	31.05.2021 -04.06.2021
FDP on advanced robotics, Ai & Industry 4.0	Coimbatore institute of technology, Coimbatore	7 Days	16.03.2021 – 20.03.2021
FDP on Introduction to Smart Grid	NPTEL-AICTE, MHRD	12 Weeks	Sep Nov 2020
FDP on Machine learning and deep learning	SRM Institute of Science and Technology, Kattankulathur	5 Days	27.05.2020 – 31.05.2020
FDP on Modern drive in electrical drives	Nagpur Institute of Technology, Nagpur	5 Days	19.05.2020 – 23.05.2020
FDP on Fuzzy logic	Kristu jayanti college, Bengaluru	1 Day	09.05.2020
FDP on AI and Machine Learning	Electronics and ICT Academies	14 Days	23.12.2019 – 27.12.2019
FDP on Accreditation and Outcome Based Learning	NPTEL-AICTE, MHRD	12 Weeks	Aug-Oct 2019
FDP on EE8251 Circuit Theory (Anna University)	K.S.R. college of Engineering, Tiruchengode	14 Days	26thNov-8thDec 2018
FDP on Basic Electrical Electronics & Instrumentation Engineering (Anna University)	Muthayammal College of Engineering, Rasipuram	7 Days	11th to 17th December 2017

FDP on power management using PMLK series	Muthayammal Engineering College, Rasipuram	2 Days	4th & 5th September 2017
FDP on Industrial drives automation and intelligent control (TEQIP-II)	Government College of Engineering, Salem	7 Days	1st to 7th March 2017
FDP on Electric Energy Generation, Utilization & Conservation. (Anna University)	K.S.Rangasamy College of Technology, Tiruchengode	7 Days	14th to 20th December 2016
FDP on Advanced controller for Electric Drives	Sona college of technology, & IEEE Madras section	2 Days	18 <sup>th</sup> and 19 <sup>th</sup> January 2011

### FACULTY DEVELOPMENT PROGRAMMES ORGANIZED

<b>Name of the FDP / Workshop</b>	<b>Organization</b>	<b>Duration</b>	<b>Month-Year</b>	<b>Capacity</b>
Design of Photovoltaic Systems for stand-alone application”	Institution of Engineers (India)	1 Day	02.12.2020	38
Product Design and Development	Institution of Engineers (India)	1 Day	20.09.2019	41
Innovative Science, Engineering and Technology for Sustainable development	DST SERB	2 Day	30th & 31st March 2018	35

### INVITED LECTURES IN CONFERENCE/SEMINAR

<b>Title of Lecture/ Academic Session</b>	<b>Title of Conference/ Seminar etc.</b>	<b>Organized By</b>
Recent challenges in industrial automation and embedded system	FDP	Sri Ramakrishna Institute of Technology, Coimbatore
Computation of power flow problems using different methods and solution	Seminar	K.S.R College of Engineering, Tiruchengode



Smart Grid	Seminar	KSR Institute of Engineering and Technology, Tiruchengode
<b>OTHER Professional URLs</b>		
Personal Website	Nil	
Linked In Profile	<a href="https://www.linkedin.com/in/vijay-kumar-77233618a/">https://www.linkedin.com/in/vijay-kumar-77233618a/</a>	
GitHub URL	Nil	
YouTube Channel	<a href="https://www.youtube.com/channel/UCFDi92AQQGikDZi2y_t3yh6Q">https://www.youtube.com/channel/UCFDi92AQQGikDZi2y_t3yh6Q</a>	
Other	Nil	