

RESUME



- 1. Name of the Candidate** : Dr.G.SIVARANJANI
- 2. Designation** : Associate Professor
- 3. Department** : Electronics and Communication Engg.
- 4. Specialization** : Applied Electronics
- 5. Date of Birth** : 06-11-1986
- 6. Residential Address** : No.1203, Casuarina,
L&T Eden Park, Phase -1
Siruseri – 603103.
Chengalpeta Dist.
- 7. Contact Number** : 9840478999 (Mobile)
- 8. E-mail** : shivapss@gmail.com
- 9. Qualifications with Class/Grade** :

Sl.No.	Course	Month & Year of Passing	Institution	Division
1.	Ph.D (Information and Communication Engg.)	October, 2019	Anna University, Chennai.	First Class
2.	M.E (Applied Electronics)	June, 2011	Anna University, Chennai	First Class
3.	B.E (Electronics and Comm. Engg)	May 2008	Adhiparasakthi Engineering College, Melmaruvathur Anna University	First Class
4.	M.Sc (Yoga for Human Excellence)	May 2021	Bharathidasan University	First Class

10. Total Experience in Years : 8 years

Polytechnic College : 1 year

Engineering College : 7 years

Organization	Period	Designation	No. of Years
Sree Sakthi Engineering College, Karamadai, Coimbatore	01.11.2019 to 30.11.2021	Associate Professor of Electronics and Comm. Engg.	2 Years
Sree Sakthi Engineering College, Karamadai, Coimbatore	05.07.2011 to 30.06.2016	Assistant Professor of Electronics and Comm. Engg.	5 Years
SRM Polytechnic College	15.06.2008 to 17.06.2009	Lecturer	1 Year

11. Important Research Publications:

Total Impact Factor : 15.538

1. "A rapid method based on computer vision for the analysis of hardness and eutrophication levels in water bodies", Desalination and Water Treatment, Vol.123, 2018, Pages 52-58. **IF: 1.254**
2. "Optimization of hydrothermal liquefaction process through machine learning approach: process conditions and oil yield", Biomass Conversion and Biorefinery, 2021. <https://doi.org/10.1007/s13399-020-01233-8>. **IF: 4.987**
3. "Optimization of hydrothermal gasification process through machine learning approach: Experimental conditions, product yield and pollution", Journal of Cleaner Production, Vol. 306, 127302, 2021. **IF: 9.297**

12.Consultancy Details:

S.No	Title of the Project	Name of the Company
1.	A software for pollution data analysis and treatment recommendation system	Zymetree Pvt. Ltd.
2.	Machine Learning based adsorbent selection process	Zymetree Pvt. Ltd.

13. Theory Subjects Handled

1. Digital Image Processing
2. Electronic Circuits
3. Electronic Devices
4. Digital Electronics
5. Communication Systems
6. Microprocessor

14. Practical Subjects Handled

1. Digital Electronics Lab
2. Communication Systems Lab
3. Microprocessor Lab
4. Electronics Circuits Lab

15. Various Responsibilities Administered:

S.No	Committee / Cell	Position Held	Responsibilities
1.	Career Guidance Cell	Coordinator (01.06.2012 to 30.06.2016)	Consultation to students on career options, Arranging Higher studies awareness programs, Arranging GRE, TOEFL, IELTS, GATE coaching programs, Helping students in applying higher studies abroad

2.	Alumni Cell	Department Coordinator	Arranging Alumni interaction programs, Collecting and maintaining alumni details and records
3.	Research and Development Cell	Member (01.11.2019 to 30.11.2021)	Suggesting for the improvement of Research & Development activities, In-charge of ECE department research activities
4.	Library Development Committee	Member	Suggesting suitable improvement options to develop library utilization, Commissioning library related purchases.

16. Project work carried out:

- Application of Computer vision and Artificial Intelligence in ecological problems
- Automatic Multilevel Thresholding in Image Processing Applications
- Image based Leaf recognition system to identify the species of the plant
- Machine learning application in determination of algae species and biomass

17. Research History of Dr.G.Sivaranjani

Dr.G.Sivaranjani has started her research career during 2013. She worked on image based species recognition of plants using the images of their leaves. She used standard image processing techniques and certain algorithms developed by her to analyze the leaf images, to reduce the noise, to use the texture and morphology to recognize the species of the plants.

In 2016, she joined as a full time research scholar in SSN College of Engineering. She worked on “Application of digital image processing in water monitoring” in which, she developed an image based interactive system to test water quality standards and the algae species present in water bodies. She completed her PhD in 2019.

Based on the methodology she developed during her PhD, she also worked with another colleague in “machine learning based optimization of energy conversion processes”. They developed a systematic approach to optimize various input characteristics and experimental conditions of the thermochemical conversion processes which used to convert biomass to fuel.

The findings were published in two highly reputed journals via Journal of Cleaner Production (Impact Factor: 9.297) and Biomass Conversion and Biorefinery (Impact Factor: 4.987).

Her research interests generally involves inter-disciplinary applications which would be highly useful to the industrial applications. She has received a consultancy project worth INR 5,00,000 (Five Lakh Rupees) from Zymetree Pvt.Ltd. to develop a software to help them acquire the wastewater characteristics from their client industries and to develop a suitable treatment system based on general recommendations and special uses.