

## SUJIYA RATHINARAJA

### Address

No.8, Swami vivekanandha street,  
Panneer garden, Pannimadai, Thudiyalur,  
Coimbatore – 641 017, Tamil Nadu.

E-mail : [suji.sreedharan@gmail.com](mailto:suji.sreedharan@gmail.com)

Mobile : +91 93636 85024



### CAREER OBJECTIVE

To secure a challenging position in a reputable organization to expand my knowledge, be a building block of the management, and become an asset to the country.

- **Research area** includes Speech Processing and Network Security.
- Current **research interests** are Voice Biometric and Pattern Recognition.

### TECHNICAL SKILLS

- Programming languages – C, Java, Python
- Web languages – HTML, CSS, JavaScript, XML, JSON, J2EE, PHP, WordPress
- Databases – SQL (MySQL)
- Report writing – Latex

### ACADEMIC RECORD

DEGREE	MAJOR	UNIVERSITY	MODE OF STUDY	YEAR
Ph.D.	Computer Science	Bharathiar University, Coimbatore, Tamil Nadu, India. <b>Dissertation Title:</b> Design and Development of a Deep Learner Based Protection System for a Dependent Speaker	Full-time	2023
M.Phil.	Computer Science	SNS College of Arts and Science, Coimbatore, Tamil Nadu, India. <b>Dissertation Title:</b> Speech Recognition using Hybrid Technique of EWTLBO and HMM	Part-time	2015
M.C.A	Computer Applications	Avinashilingam Institute for Home Science and Higher education for Women Coimbatore, Tamil Nadu, India.	Full-time	2011
B.C.A	Computer Applications	Providence College for Women, Nilgiris, Tamil Nadu, India.	Full-time	2008

### WORK EXPERIENCE

DURATION	NAME OF THE INSTITUTION	TEACHING EXPERIENCE (IN YEARS)	POSITION	JOB NATURE
27 July 2011 to 03 Oct 2015	Avinashilingam Institute for Home Science and Higher education for Women, Coimbatore, Tamil Nadu, India.	4+	Assistant Professor	Teaching
07 July 2016 to 08 march 2022	Bharathiar University, Coimbatore, Tamil Nadu, India.	6+	Teaching Assistant	Research

## **PUBLISHED**

### **Journals**

1. **Sujiya Sreedharan.**, Chandra Eswaran (2021). A Lightweight Encryption Scheme using Chebyshev Polynomial Maps. *Optik (ELSEVIER-SCIE)*, Volume 240, pp. 2-16.
2. **Sujiya Sreedharan.**, Chandra Eswaran (2020). Speech Feature Extraction using RC4 Keybased AES for Speaker Verification. *Wulfenia Journal (SCIE)*, Volume 27, pp. 19-36.
3. **Sujiya Sreedharan.**, Chandra Eswaran (2019). A Review on Speaker Verification: Challenges and Issues. *International Journal of Scientific & Technology Research (SCOPUS)*. Volume 8(8), pp. 956-960.
4. **Sujiya Sreedharan.**, Chandra Eswaran (2019). Speech Encryption using Advanced Encryption Standard for Secured Communication. *International Journal of Recent Technology and Engineering (IJRTE) (SCOPUS)*. Volume 8(3), pp. 6515-6521.
5. **Sujiya Sreedharan.**, Chandra Eswaran (2018). A Comparative Analysis of Feature Extraction Techniques for Speaker Verification. *Interciencia Journal (SCIE)*, Volume 43(8), pp. 245-264.
6. **Sujiya Sreedharan.**, Chandra Eswaran (2017). A Review on Speaker Recognition. *International Journal of Engineering and Technology (SCOPUS)*, Volume 9(3) pp.1592-1598.
7. **Sujiya Sreedharan** , Chandra Eswaran (2017). A review on speaker verification: Challenges and issues. *International Journal of Scientific and Technology Research*. Volume 8, pp. 956-960

### **Conference papers**

1. Presented and published “Optimized Variable Size Windowing Based Speaker Verification” in *International Conference on Electronics and Electrical Engineering Technology (EEET 2018)* held at Tianjin Polytechnic University, Tianjin, China.
2. Presented and published “An Analysis of Feature Selection based on Optimization Algorithms for Speaker Verification” in 10th *International Conference on Advanced Computing* held at Madras Institute of Technology Campus of Anna University, Chennai.
3. Presented an article entitled “Quadratic Chaotic Map based Encryption for Securing Speech Signal Features in Speaker Verification System” in *International Conference on Computational Sciences (ICCS 2019)* held at Department of Computer Science Alagappa University, Karaikudi.

## **JOURNALS UNDER REVIEW**

1. **Sujiya Rathinaraja.**, Chandra Eswaran (2021). A novel optimized deep learner with lightweighted encryption-based speaker verification. *Wireless Personal Communications (SPRINGER-SCIE)* (In review).

## **PATENT**

1. Patent granted and published date: 07/09/2018 on the Government website of Indian Patent Grant. entitled “*Safety Speaker Verification System for Real Time Biometric Based Applications*” under Patent Application Number: 201841032393

## **RESEARCH PROPOSAL PREPARED FOR FUNDING AGENCIES**

1. To Conduct a Survey of women population in selected area and create a directory of breast and cervical cancer patients
2. Designing an Intelligent Mobile based Real-Time Public Transportation System
3. Design and Development of a Deep Learning Technique for Speech Quality and Intelligibility Enhanced in Noisy Environment
4. AI based mobile application for cervical cancer severity stage prediction

## **PROJECTS WORKED**

1. Voice based mobile application for privacy Protection in android mobiles
2. Advanced Mobile Application based Speaker Recognition using Age and Gender Classification for Forensic Investigation

**PROFESSIONAL SERVICES**

1. Administrated college admission process.
2. Acted as External Examiner in University Laboratory Examination.
3. Acted as Internal Examiner in University Laboratory Examination.
4. Acted as Examiner in University Theory Examination.
5. Guided Undergraduate Students for Project Work.
6. Clear Study done and developed Continuous Internal Assessment Timetable.
7. Handling classes for Undergraduate, Post graduate Students and MPhil Scholars.
8. Worked as an aptitude/reasoning/computer science skill trainer in various education concerns

**LANGUAGE PROFICIENCY**

Tamil (mother tongue), English (official).

My strengths are smiling, being calm, and adapting to the changes. Identifying and resolving bottlenecks are the striking features of my working style. The knowledge imparted is knowledge gained. So, I strongly believe in continuous learning and sharing knowledge with others. With a strong sense of civic responsibility, excellent communication skills, international outlook, confidence, ability to work under pressure, flexible, dynamic, and mature attitude, I will be a productive member of the institution upon getting an opportunity. I hereby confirm that the information given above is correct to the best of my knowledge.

Place : Coimbatore

**Sincerely**



Date : 14.04.2023

(Sujiya Rathinaraja )