

## **FACULTY PROFILE**



Dr.V. SHERLIN SOLOMI, M.E, Ph.D

Assistant Professor (SG),

Department of Electronics & Communication Engineering,

Hindustan Institute of Technology & Science

[vsherlins@hindustanuniv.ac.in](mailto:vsherlins@hindustanuniv.ac.in)

**Experience:** Teaching – 5.3 years

Research – 5 years

**Research area:** Text-to-Speech synthesis, Speech signal processing, Machine learning, NLP,  
Image processing.

### **Publications**

#### **Journal Publications**

1. W. Jino Hans, V. Sherlin Solomi, N. Venkateswaran, “On-Road Deer Detection for Advanced Driver Assistance using Convolutional Neural Network”, International Journal of Advanced Computer Science and Applications, Vol. 11, No. 4, April 2020, pp. 754-761.
2. V. Sherlin Solomi, P. Vijayalakshmi, T. Nagarajan, "Exploiting Acoustic Similarities between Tamil and Indian English in the Development of an HMM-based Bilingual Synthesizer", IET Signal Processing, Vol. 11, No. 3, May 2017, pp. 332 - 340
3. G. Anushiya Rachel, V. Sherlin Solomi, K. Naveen kumar, P. Vijayalakshmi and T. Nagarajan, "A low footprint context-independent HMM-based speech synthesizer for Tamil" in the International Journal of Speech Technology, Vol. 18, No.3 pp. 405 - 418

#### **Conference Presentations**

1. V. Sherlin Solomi, K. Bharath, M. Suresh, K .Sai Krishna, “IOT based safe driving for an Intelligent Transport System”, in the Proceedings of 2nd International conference on

Information, Embedded & Communication systems, ICIECS - 2019, St. Joseph College of Engineering, Chennai, 22nd March, 2019.

2. S. Johanan Joysingh, M. Nanmalar, G. Anushiya Rachel, V. Sherlin Solomi, P. Vijayalakshmi, T. Nagarajan, "Development of a Speech-Enabled Interactive Enquiry System in Tamil for Agriculture", Tamil Internet Conference, Toronto, Canada, Aug. 2017.
3. V. Sherlin Solomi, G. Anushiya Rachel, P. Vijayalakshmi, T. Nagarajan, "Phone Mapping-based Mixed-language synthesizer for Tamil and Indian English", 15th Tamil Internet Conference, Dindigul, Sep. 2016. (Best Paper Award)
4. V. Sherlin Solomi, M.S. Saranya, G. Anushiya Rachel, P. Vijayalakshmi, T. Nagarajan, "Performance Comparison of KLD and PoG Metrics for Finding the Acoustic Similarity Between Phonemes for the Development of a Polyglot Synthesizer", IEEE TENCON, Bangkok, Thailand, 2014, pp. 1 - 4.
5. G. Anushiya Rachel, S. Lilly Christina, V. Sherlin Solomi, B. Ramani, P. Vijayalakshmi, T. Nagarajan, "Development and Analysis of Various Phone-Sized Unit-Based Speech Synthesizers", COCODSA, Gurgaon, India, 2013, pp. 1 - 5.
6. V. Sherlin Solomi, S. Lilly Christina, G. Anushiya Rachel, B. Ramani, P. Vijayalakshmi, T. Nagarajan, "Analysis on Acoustic Similarities between Tamil and English Phonemes using Product of Likelihood-Gaussians for an HMM-Based Mixed-Language Synthesizer", COCODSA, Gurgaon, India, 2013, pp. 1 - 5.
7. B. Ramani, S. Lilly Christina, G. Anushiya Rachel, V. Sherlin Solomi, Mahesh Kumar Nandwana, Anusha Prakash, Aswin Shanmugam, Raghava Krishnan, S. Kishore Prahalad, K. Samudravijaya, P. Vijayalakshmi, T. Nagarajan and Hema Murthy, "A Common Attribute based Unified HTS Framework for Speech Synthesis in Indian Languages", ISCA - SSW8, Barcelona, Spain, 2013, pp. 291 - 296.
8. B. Ramani, V. Sherlin Solomi, G. Anushiya Rachel, S. Lilly Christina, P. Vijayalakshmi, T. Nagarajan, Hema A Murthy, "Development and Evaluation of Unit Selection and HMM-based Speech Synthesis for Tamil", NCC, Delhi, India, 2013, pp. 1 - 5.
9. M. Anbu Swarna Priyanka, V. Sherlin Solomi, P. Vijayalakshmi, T. Nagarajan, "Multiresolution Feature Extraction (MRFE) based speech recognition system", International Conference on Recent Trends in Information Technology (ICRTIT), Madras Institute of Technology campus of Anna University, Chennai, 25-27 July 2013, pp. 152-156.
10. M. Anbu Swarna Priyanka, V. Sherlin Solomi, P. Vijayalakshmi, T. Nagarajan, "Speech recognition system developed using Multiresolution Feature Extraction (MRFE) for sparse data" in Proc. of National Conf. on Signal Processing, Communication and VLSI Design (NCSCV'13), 2013, pp. 302 - 306.