

# Srikanth Ronanki

## Areas of interest

- Prosody Modeling, Text-To-Speech Synthesis

## Education

- Oct 2014 – **PhD, Centre for Speech Technology Research – University of Edinburgh.**  
present Expected: Sept 2017  
Adviser: Prof. Simon King
- July 2011 – **MS by Research, Speech and Vision Lab – IIIT-Hyderabad.**  
Apr 2014 Adviser: Dr. Kishore S. Prahallad  
Cumulative GPA: 8.25/10
- July 2007 – **Bachelor of Technology – IIIT-Hyderabad.**  
July 2011 Cumulative GPA: 7.1/10

## Experience

- Oct 2014 – **Centre for Speech Technology Research, EDINBURGH UNIVERSITY, UK.**  
present - Joint F0 and duration models for prosody using Deep Neural Networks  
- Developed an approach for hierarchical clustering of intonation patterns and modeling with RNNs  
- Code: [https://github.com/ronanki/DNN\\_TTS](https://github.com/ronanki/DNN_TTS)
- Jan–Oct 2014 **[24]7 inc., ILABS, Bangalore, India.**  
- Implemented text normalization for chat data and integrated with virtual assistant for chats.  
- Investigated the importance of use of Omnichannel data for natural language understanding and explored different machine learning techniques for modeling.  
- Experimented with fine-tuning of parameters in statistical language models for speech recognition.  
- Framework: *Python/Java environment*, Tools: *SRISLMTK*;
- Sep–Dec **Akshar Speech technologies pvt. ltd., HYDERABAD, India.**  
2013 - Worked on short-domain text-to-speech systems and high quality pre-processing of speech data for unit selection synthesizers.
- May–Sep **Google Summer of code Internship, ANKUR-INDIA, India.**  
2013 - Developed speech based Indic IVRS with open-source Ankur-India organization.  
- Constructed wrappers which work around Festival/Festvox for TTS and Sphinx/CMUCLMTK for ASR.  
- Implemented a small module for speech enhancement and tested the whole system on limited vocabulary domain-specific data.  
- Project URL: <http://indicivrs.blogspot.com>  
- Code: [https://github.com/bhavibond/Indic\\_IVRS](https://github.com/bhavibond/Indic_IVRS)
- Feb–May **CSTR Internship, EDINBURGH UNIVERSITY, UK.**  
2013 - Implemented an approach for clustering of syllables with prosodic information and integrated with HMM models for acoustic modeling.
- July– **Google Summer of code Internship, CMUSPHINX, USA.**  
September - Designed a web based Pronunciation Evaluation scoring routine using CMUSphinx speech recognition  
2012 which provides necessary feedback on mispronunciation at phone/word level.  
- Implemented text-independent scoring routine and evaluated on Indian-accented speech data.  
- Project URL: <http://pronunciationeval.blogspot.com>  
- Code: <http://goo.gl/UYAEPg>

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## Publications

1. **Srikanth Ronanki**, Gustav Eje Henter, Zhizheng Wu, Simon King. “*A template-based approach for speech synthesis intonation generation using LSTMs*”. In submission to Interspeech, 2016.
2. **Srikanth Ronanki**, Siva Reddy, Bajibabu Bollepalli, Simon King. “*DNN-based speech synthesis for Indian languages from ASCII text*”. In submission to SSW, 2016.
3. Gustav Eje Henter, **Srikanth Ronanki**, Oliver Watts, Mirjam Wester, Zhizheng Wu, Simon King. “*Robust TTS duration modelling using DNNs*”. In proc. of ICASSP, 2016.
4. Oliver Watts, **Srikanth Ronanki**, Zhizheng Wu, Tuomo Raitio, Antti Suni. “*The NST-GlottHMM entry to the Blizzard Challenge 2015*”. The Blizzard Challenge workshop, 2015.
5. **Srikanth Ronanki**, Li-Bo, James Salsman. “*Automatic Pronunciation Evaluation And Mispronunciation Detection Using CMUSphinx*”. In proc. of SLP-TED workshop, Coling-2012.
6. **Srikanth Ronanki**, Bajibabu Bollepalli and Kishore S. Prahallad. “*Duration Modelling in Voice Conversion Using Artificial Neural Networks*”. In proc. of IWSSIP, 2012.
7. Bajibabu Bollepalli, **Srikanth Ronanki**, Sathya Adithya Thati, Bhiksha Raj, B. Yegnanarayana and Kishore S. Prahallad. “*A Comparison of Prosody Modification Using Instants of Significant Excitation and Mel-cepstral Vocoder*”. In proc. of Centenary Conference, IISc Bangalore, 2011.

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## Other technical papers

1. **Srikanth Ronanki**, Zhizheng Wu, and Robert A. J. Clark, “*Joint Modeling of F0 and Duration in Deep Neural Network Based Speech Synthesis*”, UKSpeech workshop, 2015.
2. **Srikanth Ronanki**, Oliver Watts, Simon King and Robert A. J. Clark, “*Syllable based models for prosody modeling in HMM based speech synthesis*”, Simple4All intern report, 2013.
3. **Srikanth Ronanki**, Kishore S. Prahallad, “*Prosody Modeling for Voice Conversion*”, research project report, 2013.
4. **Srikanth Ronanki**, Peri Bhaskararao, and Kishore S. Prahallad, “*Acoustic correlates of syllable-level prominence in Telugu*”, research project report, 2012.

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## Thesis work

Masters	Primarily, worked towards speech synthesis systems to overcome some of the existing drawbacks.
Thesis	Explored the issues in modeling the sub-word units, and proposed an approach using longer size units such as syllable, and build a statistical template for each syllable using dynamic programming to inherently capture the trajectories

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## Technical Skill Set

Languages	Python, C, MATLAB, C++ (Basic), Java (Basic)
Tools	LaTeX, HTML, PHP
Systems	Linux, Microsoft Windows

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## Extra-Curricular activities

- Students Finance Secretary of IIIT-H from 2009-11
- System Administrator for Electronic Courier Portal in IIIT-H from 2009-2012
- Member of a Volleyball Team and Football at Inter-college level

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## References

Available upon request.