Ashutosh Pandey

395 Dreese Laboratories 2015 Neil Avenue The Ohio State University Columbus, OH 43210, USA Phone: 1-(614)-962-9819 Email: pandey.99@osu.edu Homepage: ashutosh620.github.io

RESEARCH INTERESTS

Speech enhancement and separation, speech dereverberation, speaker separation, deep learning

EDUCATION

Ph.D. student, Computer Science and Engineering The Ohio State University (OSU), Columbus, OH, USA

August 2016 - Present

Advisor: Prof. DeLiang Wang

GPA: 4.0/4.0

B.Tech, Electronics and Communication Engineering August 2011 - June 2015 Indian Institute of Technology Guwahati, Guwahati, Assam, India

Thesis: Significance of Glottal Activity Detection for Speaker Verification in Degraded

and Limited Data Condition Advisor: Prof. S.R.M. Prasanna

GPA: 8.92/10.0

PUBLICATIONS

[3] **Ashutosh Pandey** and DeLiang Wang, "A New Framework for Supervised Speech Enhancement in the Time Domain", in *proceedings of INTERSPEECH*, 2018, pp. 1136-1140.

[2] **Ashutosh Pandey** and DeLiang Wang, "On Adversarial Training and Loss Functions for Speech Enhancement", in *proceedings of ICASSP*, 2018, pp. 5414-5418.

[1] **Ashutosh Pandey**, Rohan Kumar Das, Nagraj Adiga, Naresh Gupta and S R Mahadeva Prasanna, "Significance of Glottal Activity Detection for Speaker Verification in Degraded and Limited Data Condition", in *proceedings of TENCON*, 2015, pp. 1-6.

SUBMITTED PAPERS

[3] **Ashutosh Pandey** and DeLiang Wang, "TCNN: Temporal Convolutional Neural Network for Real-Time Speech Enhancement in the Time Domain", submitted in *ICASSP*, 2019

[2] **Ashutosh Pandey** and DeLiang Wang, "Exploring Deep Complex Networks for Complex Spectrogram Enhancement", submitted in *ICASSP*, 2019.

[1] **Ashutosh Pandey** and DeLiang Wang, "A New Framework for CNN Based Speech Enhancement in the Time Domain", submitted in *IEEE/ACM Transactions on Audio*, Speech, and Language Processing.

RESEARCH EXPERIENCES

Graduate Research Associate August 2017 - present Perception and Neurodynamics Laboratory (PNL), The Ohio State University, Columbus, OH, USA

- Speech Enhancement
- Speech Dereverberation

• Speaker Separation

Research Engineer

June 2015 - June 2016

Aspiring Minds Assessment Pvt Limited

- Natural Language Processing
- Machine Learning

Research Intern

May 2014 - July 2014

University of Alberta, Edmonton, Alberta, Canada

- Hardware simulation of gene regulatory networks (GRNs)
- Simulink and Modelsim

B.Tech Thesis

August 2014 - April 2015

Indian Institute of Technology Guwahati, Assam, India

ullet Speaker verification

SKILLS&TOOLS Python, C++, TensorFlow, PyTorch, Keras, MATLAB

SERVICES Reviewer:

- IEEE/ACM Transactions on Audio, Speech, and Language Processing
- AAAI Conference on Artificial Intelligence