9 REFERENCES

[1] C. Liu, J. Trmal, M. Wiesner, C. Harman, S. Khudanpur, "Topic identification for speech without asr.," *in Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH,* Vols. 2017-August, 2017, pp. 2501–2505.

[2] A. Ram, R. Prasad, C. Khatri, A. Venkatesh, R. Gabriel, Q. Liu, J. Nunn, B. Hedayatnia, M. Cheng, A. Nagar et al, "Conversational ai: The science behind the alexa prize," *arXiv preprint arXiv:1801.03604, 2018.*

[3] Y.-P. Chen, R. Price, and S. Bangalore, "Spoken language understanding without speech recognition," *2018 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). IEEE,* 2018, pp. 6189–6193..

[4] Amodei, Dario, Sundaram Ananthanarayanan, Rishita Anubhai, Jingliang Bai, Eric Battenberg, Carl Case, Jared Casper et al, "Deep speech 2: End-to-end speech recognition in english and mandarin.," *In International conference on machine learning, pp. 173-182. PMLR, 2016..*

[5] Yi, Cheng, Jianzhong Wang, Ning Cheng, Shiyu Zhou, and Bo Xu, "Applying wav2vec2. 0 to speech recognition in various low-resource languages.," *arXiv preprint arXiv:2012.12121 (2020).*

[6] Povey, Daniel, Arnab Ghoshal, Gilles Boulianne, Lukas Burget, Ondrej Glembek, Nagendra Goel, Mirko Hannemann et al, "The Kaldi speech recognition toolkit.," *In IEEE 2011 workshop on automatic speech recognition and understanding, no. CONF. IEEE Signal Processing Society, 2011.*

[7] Agarwal, Aashish, and Torsten Zesch, "LTL-UDE at Low-Resource Speech-to-Text Shared Task: Investigating Mozilla DeepSpeech in a low-resource setting.," *In SwissText/KONVENS. 2020.*

[8] Karunanayake, Yohan, Uthayasanker Thayasivam, and Surangika Ranathunga, "Transfer learning based free-form speech command classification for low-resource languages.," *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics: Student Research Workshop, pp. 288-294.,* 2019.

[9] Kunze, Julius, Louis Kirsch, Ilia Kurenkov, Andreas Krug, Jens Johannsmeier, and Sebastian Stober, "Transfer learning for speech recognition on a budget.," *arXiv preprint arXiv:1706.00290,* 2017.

[10] Misbullah, Alim, Kurnia Saputra, and Fauzy Nisa., "Customized Acoustic Model using Low-Resource Indonesian Speech Dataset for Short Command Speech Recognition System.," *2021 International Conference on Computer System, Information Technology, and Electrical Engineering (COSITE), pp. 176-180. IEEE,* 2021.

[11] McGraw, Ian, Rohit Prabhavalkar, Raziel Alvarez, Montse Gonzalez Arenas, Kanishka Rao, David Rybach, Ouais Alsharif et al, ""Personalized speech recognition on mobile devices.," *In 2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pp. 5955-5959. IEEE,* 2016.

[12] L. Lugosch, M. Ravanelli, P. Ignoto, V. S. Tomar, and Y. Bengio, "Speech model pre-training for endto-end spoken language understanding,," *arXiv preprint arXiv:1904.03670,* 2019.

[13] Kunze, Julius, Louis Kirsch, Ilia Kurenkov, Andreas Krug, Jens Johannsmeier, and Sebastian Stober, "Transfer learning for speech recognition on a budget.," *arXiv preprint arXiv:1706.00290,* 2017.

[14] Wang, Changhan, Juan Pino, and Jiatao Gu., "Improving cross-lingual transfer learning for end-to-end speech recognition with speech translation.," *arXiv preprint arXiv:2006.05474,* 2020.

[15] Karunanayake, Yohan, Uthayasanker Thayasivam, and Surangika Ranathunga, "Sinhala and tamil speech intent identification from english phoneme based asr.," *2019 International Conference on Asian Language Processing (IALP), pp. 234-239. IEEE,* 2019.

[16] Lugosch, Loren, Mirco Ravanelli, Patrick Ignoto, Vikrant Singh Tomar, and Yoshua Bengio, "Speech model pre-training for end-to-end spoken language understanding.," *arXiv preprint arXiv:1904.03670,* 2019.

[17] Chong, Thern Chang, Nien Loong Loo, Yeong Shiong Chiew, Mohd Basri Mat-Nor, and Azrina Md Ralib., "Classification Patient-Ventilator Asynchrony with Dual-Input Convolutional Neural Network.," *IFAC-PapersOnLine 54, no. 15 (2021),* pp. 322-327.

[18] Sun, Sukkyu, Ahnul Ha, Young Kook Kim, Byeong Wook Yoo, Hee Chan Kim, and Ki Ho Park., "Dual-input convolutional neural network for glaucoma diagnosis using spectral-domain optical coherence tomography.," *British Journal of Ophthalmology 105, no. 11 (2021): 1555-1560.*

[19] Wijayasingha, Lahiru, and John A. Stankovic., "Robustness to noise for speech emotion classification using CNNs and attention mechanisms.," *Smart Health 19 (2021): 100165.*

[20] Snoek, Jasper, Hugo Larochelle, and Ryan P. Adams, "Practical bayesian optimization of machine learning algorithms," *Advances in neural information processing systems 25 (2012).*