# **Shammur Absar Chowdhury**

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## **Academic Expertise and Research Interest**

- **Speech Signal Processing**: Representation Learning, Atypical Human Interaction, Non-Verbal Communication, Speech Discourse and Turn-taking, Speech/Multimodal Augmentation methods, Spoken Language Assessment.
- **Natural Language Processing**: (Large) Language models and its linguistic task understanding capabilities, Offensive and hate speech modeling.
- **Explainable and Inclusive Speech Technology**: Dialectal and Accented Speech Recognition systems, Children Speech Recognition, Multilingual speech systems, Speaker Recognition systems, and large Self-supervised models.

## Scholar Profile

• Google Scholar <a>Index: 24</a>, i10-index: 56

## Education

PhD in Information and Communication Technology

Nov 2012 – Apr 2017

University of Trento, Italy
 Thesis Title: Computational Modeling of Turn-Taking Dynamics in Spoken Conversations ☑.

Supervisor: Prof. Giuseppe Riccardi, University of Trento, Italy.

# Bachelor of Science in Electronics and Communication Engineering with $2^{nd}$ major in Bachelor of Science in Computer Science

BRAC University, Bangladesh
 CGPA: 3.97/4.0 (Gold medalist and Valedictorian for getting highest CGPA among all

University Graduates, 2011).

Thesis Title: Implementation of Speech Recognition System for Bangla ☑.

Supervisor: Prof. Mumit Khan, BRAC University, Bangladesh

Jan 2007 – Dec 2010 (Convocation Feb 2011)

# Research Work Experience \_\_\_\_\_

Research Scientist, Qatar Computing Research Institute, HBKU, Qatar

Oct 2021 - Present

- Funded projects:
  - Fanar: Arabic LLMs 

    ☐ (Speech Lead),
  - NAVIA: Neurodiversity Assessment and Voice-enabled Intervention AI ∠ (Lead PI)
  - QVoice **☑** (Lead PI)
- Other Projects:
  - AURA: Audio Understanding & Representation Alignment (*Lead*)
  - LLMeBench ☑, MultimodalXplain ☑

**Visiting Researcher**, Frederick Jelinek Memorial Summer Workshop (JHU) *Project:* Multilingual and Code-Switching Speech Recognition ☑

Jul 2022 – Aug 2022

Postdoctoral Researcher, Qatar Computing Research Institute, HBKU, Qatar

May 2019 – Oct 2021

- Design End-to-End Dialect Identification, Dialectal and Code-switching ASR among others.
- Design Multi-label short text classification for topic extraction (English and Arabic)
- Design Prediction model for Offensive language detection (English and Arabic)

**Research Fellow**, Center for Mind/Brain Sciences, University of Trento, Trento, Italy

May 2019 - Apr 2021

• Interpretability of Language Model representation for rare linguistic phenomena

 Simulation and Interpretation of 'online' vs 'off-line' processing of sentences using transformer models.

Postdoctoral Researcher, Center for Mind/Brain Sciences, University of Trento, Italy

Sep 2017 - Apr 2019

- Simulation of Grammaticality Judgements using DNN models
- Artificial production (Data generation) and Corrections of ungrammatical scenarios.

**PhD Researcher**, Signals and Interactive Systems Lab, University of Trento, Italy

Nov 2012 - Apr 2017

- Modeling Turn-taking behavior and Discourse of overlap and silence in spoken conversations (using acoustic and lexical information).
- Modeling Automatic Conversation Flow facilitator and Information profiler for callcenter data analytics system.
- Extraction of Non-verbal features for para-semantic prediction (part of EU-funded project: SENSEI ☑).
- Cross-Language Annotation porting using crowdsourcing platform (part of EU-funded project: PortDial ☑.
- Speech Recognition system for Dyadic conversation Italian (Telephony data).

Research Assistant, SIS Lab, University of Trento, Trento, Italy

Mar 2012 - Oct 2012

Speech Recognition for Italian language using LUNA spoken dialog corpus.

**Senior Research Assistant**, Center for Research on Bangla Language Processing (CR-BLP), BRAC University, Dhaka Bangladesh

Oct 2010 – Feb 2012

- Developed a new voice for Bangla Text to Speech (TTS);
- Developed a newspaper speech corpus ( https://sourceforge.net/projects/blp ☑).

## **Teaching Experience** \_

**Lecturer**, Department of Computer Science and Engineering BRAC University, Dhaka Bangladesh

Jan 2011 – Feb 2012

• Courses Taken: Introduction to Computer Science, Programming Language I and II, Numerical Methods, Electronic Device II.

**Teaching Assistant**, Department of Computer Science and Engineering BRAC University, Dhaka Bangladesh

Oct 2008 - Aug 2010

• Assisted Courses: Programming Language I. Programming Language II.

# **Mentoring Experience** \_

Currently mentoring 11 students (1 Postdoc, 4 RAs, 6 Undergrads) across projects like Fanar, QVoice, MultimodalXplain, and AURA. Previously supervised 7 students through various QCRI internship programs and other collaborations.

# Selected Projects \_\_\_\_\_

### **Current Projects**

- Fanar: Arabic Large Language Model Family 🗹 Speech Lead
  - Leading the design of multimodal LLMs for dialectal Arabic, focusing on spoken language understanding and multimodal feedback generation.
- NAVIA: Neurodiversity Assessment and Voice-enabled Intervention AI Z Lead PI
  - Design a holistic framework for early screening and intervention of Autism Spectrum Disorder (ASD) using multimodal AI.
- - Developing spoken Arabic language learning platforms with voice-enabled input and interactive feedback systems to support native and non-native learners.

- LLMeBench
  - Designing a comprehensive benchmarking framework to evaluate the understanding and generation capabilities of (multimodal) LLMs.
- AURA: Audio Understanding & Representation Alignment Lead
  - Explores self-supervised and multimodal learning techniques to develop robust audio representations for audio understanding tasks. Focuses on aligning acoustic, semantic and paralinguistic features to improve cross-modal learning, and performance across multilingual, multi-dialectal and low-resource settings.
- MultimodalXplain
  - Explores how models encode and represent information across multimodal inputs (e.g., speech + text), designing methods to analyze internal representations, captured concepts, and cross-modal feature alignment.

## **Past Projects**

- Robust Speech Recognition for Code-switched Arabic speech
- ASAD: Arabic Social media Analytics and unDerstanding
- Automatic Persona Generation 🗹
- TREIL: Technologies for Research and Education in Linguistics & (PRIN, MUR funded project).
- SENSEI: Making Sense of Human Human Conversation ☑ (EU-funded project).
- PortDial: Language Resources for Portable Multilingual Spoken Dialogue Systems 🗹 (EU-funded project).
- Conversational and Italian Telephony Speech Recognition System.
- Turn-taking modeling, Overlapping Speech and its Discourse in multi-speaker conversation
- Voice Creation for Bangla Text To Speech

### **Platforms**

- BNLP
  - Building resources for Bangla Language Computing. The project include creating Bangla Content Annotation Bank, ASR, TTS-voice, speech and text corpus, Sentiment Analytics among others. (Co-Founder)
- ArabicSpeech
  - ArabicSpeech is a community that runs for the benefit of Arabic Speech Science and to push the boundaries for Arabic speech to make it world-class technology

## **Selected Grants**

- Neurodiversity Assessment and Voice-enabled Intervention AI (NAVIA), Shammur Chowdhury (LPI), funded by SRG-3 for 2 years, USD 207,000 (750,000 QAR), (2025-2027)
- Native, Local and Cultural Alignment in Multilingual and Multimodal LLMs, Shammur Chowdhury (Co-PI), funded jointly by AWS BOT (USD 50,000) and QCRI (2025-2026)
- Exploration of Audio Discrete tokens for multilingual models, Shammur Chowdhury (LPI), funded in-part by Google for Education (USD 5000).
- RNN-based Artificial Grammaticality to Probe Language Universals, Shammur Chowdhury (Co-PI), supported by NVIDIA Academic Hardware Grant, 2018.

## Selected Talks

- Tutorial: LLMs for Low Resource Languages in Multilingual, Multimodal and Dialectal Settings, (EACL 2024)
- **Webinar Talk**: Towards L1-aware Multilingual Mispronunciation Detection Modeling, (Speech and Language Technology in Education webinar series, 2024)
- Invited Talk: Learning Pronunciation with Voice-Enabled AI, (WISE Summit 2023)
- Invited Talk: Multilingual and Code-Switching Speech Recognition, JSALT report. (SLT 2022)
- Invited Talk: Fine-Grained Interpretation of End-to-End Speech Models (SIGML 2021)
- Fireside Chat on Bangla NLP (Bengali.AI 2021)

## **Membership in Professional Societies**

Member, **IEEE**, since 2009; Member, **ISCA** (International Speech Communication Association), since 2013; Member, **ACL** (Association for Computational Linguistics), since 2018.

## **Professional Activities**

## **Scientific Articles Program Committee (selected)**

ICASSP, INTERSPEECH, Computer Speech and Language, Speech Communication, The Journal of the Acoustical Society of America, ACL, COLING, NAACL, EMNLP, Language Resources and Evaluation, ACM Transactions on Asian and Low-Resource Language Information Processing, ICLR

## Workshop and Shared-task Co-organizing (selected)

- 16th International Workshop on Spoken Dialogue Systems Technology (IWSDS 2026), as Technical Chair
- Second Bangla Language Processing (BLP) @ AACL 2025, as organizer
- Workshop on Detecting AI Generated Content (GenAI) @ COLING 2025, as organizer
- First Bangla Language Processing (BLP) @ EMNLP 2023, as organizer
- Connecting Early Career Researchers Lecture and Panels (with ISCA-PECRAC) at Interspeech 2022-2024, Organizer
- First Bangla Language Processing Workshop at EMNLP 2023, Singapore
- IEEE Spoken Language Technology (SLT) 2022, Qatar as Local Chair
- Data, Technologies, and Benchmarks for the Spoken Languages of the World, at SLT 2022, Qatar
- SemEval2022 Task 3: Presupposed Taxonomies Evaluating Neural-network Semantics (PreTENS), at NAACL 2022, USA
- Project: Multilingual and Code-Switching Speech Recognition, JSALT 2022 at JHU, USA.

## **Special Interest Groups**

- Speech and Language in Technology in Education, (ISCA-SLaTE), Coordinator
- Postdoc & Early Career Researcher Advising Committee (ISCA-PECRAC), Coordinator
- WomenInSpeech (ISCA) and SIGML (ISCA)

## Publications

- 1. Asım Ersoy, Basel Mousi, Shammur Chowdhury, Firoj Alam, Fahim Dalvi, and Nadir Durrani. From words to waves: Analyzing concept formation in speech and text-based foundation models. In *Proc. of the 26th Annual Conference of the International Speech Communication Association (INTERSPEECH)*, 2025
- 2. Firoj Alam, Md Arid Hasan, and Shammur Absar Chowdhury. Spokennativqa: Multilingual everyday spoken queries for llms. In *Proc. of the 26th Annual Conference of the International Speech Communication Association (INTER-SPEECH)*, 2025
- 3. Vasista Sai Lodagala, Lamya Alkanhal, Daniel Izham, Shivam Mehta, Sadeen Alharbi, Shammur Chowdhury, Aqeelah Makki, Hamdy S. Hussein, Gustav Eje Henter, and Ahmed Ali. SawtArabi: A benchmark corpus for arabic tts. standard, dialectal and code-switching. In *Proc. of the 26th Annual Conference of the International Speech Communication Association (INTERSPEECH)*, 2025
- 4. Md Arid Hasan, Maram Hasanain, Fatema Ahmad, Sahinur Rahman Laskar, Sunaya Upadhyay, Vrunda N Sukhadia, Mucahid Kutlu, Shammur Absar Chowdhury, and Firoj Alam. NativQA: Multilingual culturally-aligned natural query for llms. *ACL*, 2025
- 5. Fanar Team, Ummar Abbas, Mohammad Shahmeer Ahmad, Firoj Alam, Enes Altinisik, Ehsannedin Asgari, Yazan Boshmaf, Sabri Boughorbel, Sanjay Chawla, Shammur Chowdhury, et al. Fanar: An arabic-centric multimodal generative ai platform. *arXiv preprint arXiv:2501.13944*, 2025

- 6. Mohammad Jahid Ibna Basher, Md Kowsher, Md Saiful Islam, Rabindra Nath Nandi, Nusrat Jahan Prottasha, Mehadi Hasan Menon, Tareq Al Muntasir, Shammur Absar Chowdhury, Firoj Alam, Niloofar Yousefi, et al. BnTTS: Few-shot speaker adaptation in low-resource setting. *NAACL*, 2025
- 7. Shammur Absar Chowdhury, Hind Almerekhi, Mucahid Kutlu, Kaan Efe Keles, Fatema Ahmad, Tasnim Mohiuddin, George Mikros, and Firoj Alam. GenAl content detection task 2: Ai vs. human–academic essay authenticity challenge. *COLING*, 2025
- 8. Basel Mousi, Nadir Durrani, Fatema Ahmad, Md Arid Hasan, Maram Hasanain, Tameem Kabbani, Fahim Dalvi, Shammur Absar Chowdhury, and Firoj Alam. AraDiCE: Benchmarks for dialectal and cultural capabilities in llms. *COLING*, 2025

- 9. Vrunda N. Sukhadia and Shammur Absar Chowdhury. Children's speech recognition through discrete token enhancement. In *Proc. of the 25th Annual Conference of the International Speech Communication Association (INTER-SPEECH)*, 2024
- 10. Yassine El Kheir, Hamdy Mubarak, Ahmed Ali, and Shammur Absar Chowdhury. Beyond orthography: Automatic recovery of short vowels and dialectal sounds in arabic. In *Proc. of the 62nd Annual Meeting of the Association for Computational Linquistics (ACL)*, 2024
- 11. Yassine El Kheir, Shammur Absar Chowdhury, and Ahmed Ali. L1-aware multilingual mispronunciation detection framework. In *Proc. of the IEEE International Conference on Acoustics*, *Speech and Signal Processing (ICASSP)*, pages 12752–12756. IEEE, 2024
- 12. Amir Hussein, Dorsa Zeinali, Ondřej Klejch, Matthew Wiesner, Brian Yan, Shammur Chowdhury, Ahmed Ali, Shinji Watanabe, and Sanjeev Khudanpur. Speech collage: code-switched audio generation by collaging monolingual corpora. In *Proc. of the IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 12006–12010. IEEE, 2024
- 13. Yassine El Kheir, Ahmed Ali, and Shammur Absar Chowdhury. Speech representation analysis based on interand intra-model similarities. In 2024 IEEE International Conference on Acoustics, Speech, and Signal Processing Workshops (ICASSPW), pages 848–852. IEEE, 2024
- 14. Ahmed Abdelali, Hamdy Mubarak, Shammur Absar Chowdhury, Maram Hasanain, Basel Mousi, Sabri Boughorbel, Samir Abdaljalil, Yassine El Kheir, Daniel Izham, Fahim Dalvi, Majd Hawasly, Nizi Nazar, Yousseif Elshahawy, Ahmed Ali, Nadir Durrani, Natasa Milic-Frayling, and Firoj Alam. LAraBench: Benchmarking Arabic Al with Large Language Models. In *Proc. of the 18th Conference of the European Chapter of the Association for Computational Linguistics (EACL)*, Malta, March 2024. Association for Computational Linguistics
- 15. Fahim Dalvi, Maram Hasanain, Sabri Boughorbel, Basel Mousi, Samir Abdaljalil, Nizi Nazar, Ahmed Abdelali, Shammur Absar Chowdhury, Hamdy Mubarak, Ahmed Ali, Majd Hawasly, Nadir Durrani, and Firoj Alam. LLMeBench: A flexible framework for accelerating llms benchmarking. In *Proc. of the 18th Conference of the European Chapter of the Association for Computational Linguistics: System Demonstrations (EACL)*, 2024

- 16. Yassine Kheir, Ahmed Ali, and Shammur Chowdhury. Automatic pronunciation assessment-a review. In *Proc. of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, pages 8304–8324, 2023
- 17. Yassine El Kheir, Shammur Absar Chowdhury, and Ahmed Ali. Speechblender: Speech augmentation framework for mispronunciation data generation. In *Proc. of the Speech and Language Technology in Education (SLaTE)*, 2023
- 18. Yassine El Kheir, Shammur Absar Chowdhury, and Ahmed Ali. Multi-view multi-task representation learning for mispronunciation detection. In *Proc. of the Speech and Language Technology in Education (SLaTE)*, 2023
- 19. Shammur Absar Chowdhury, Nadir Durrani, and Ahmed Ali. What do end-to-end speech models learn about speaker, language and channel information? a layer-wise and neuron-level analysis. *Computer Speech & Language*, 83:101539, 2023

- 20. Rabindra Nath Nandi, Mehadi Menon, Tareq Muntasir, Sagor Sarker, Quazi Sarwar Muhtaseem, Md Tariqul Islam, Shammur Chowdhury, and Firoj Alam. Pseudo-labeling for domain-agnostic bangla automatic speech recognition. In *Proc. of the First Workshop on Bangla Language Processing (BLP-2023)*, pages 152–162, 2023
- 21. Shammur Absar Chowdhury and Ahmed Ali. Multilingual word error rate estimation: E-wer3. In *ICASSP 2023-2023 IEEE International Conference on Acoustics*, Speech and Signal Processing (ICASSP), 2023
- 22. Yassine El Kheir, Fouad Khnaisser, Shammur Absar Chowdhury, Hamdy Mubarak, Shazia Afzal, and Ahmed Ali. Qvoice: Arabic speech pronunciation learning application. In *INTERSPEECH*, 2023
- 23. Yousseif Elshahawy, Yassine El Kheir, Shammur Absar Chowdhury, and Ahmed Ali. Myvoice: Arabic speech resource collaboration platform. In *INTERSPEECH*, 2023
- 24. Hamdy Mubarak, Sabit Hassan, and Shammur Absar Chowdhury. Emojis as anchors to detect arabic offensive language and hate speech. *Natural Language Engineering (NLE) Journal*, 2022

- 25. Sebastian P Bayerl, Gabriel Roccabruna, Shammur Absar Chowdhury, Tommaso Ciulli, Morena Danieli, Korbinian Riedhammer, and Giuseppe Riccardi. What can speech and language tell us about the working alliance in psychotherapy. In *Proc. of the 23rd Annual Conference of the International Speech Communication Association (INTER-SPEECH)*, 2022
- 26. Roberto Zamparelli, Shammur Chowdhury, Dominique Brunato, Cristiano Chesi, Felice Dell'Orletta, Md Arid Hasan, and Giulia Venturi. Semeval-2022 task 3: Pretens-evaluating neural networks on presuppositional semantic knowledge. In *Proc. of the 16th International Workshop on Semantic Evaluation (SemEval-2022)*, pages 228–238, 2022
- 27. Amir Hussein, Shammur Absar Chowdhury, Ahmed Abdelali, Najim Dehak, Ahmed Ali, and Sanjeev Khudanpur. Textual data augmentation for arabic-english code-switching speech recognition. In 2022 IEEE Spoken Language Technology Workshop (SLT), pages 777–784. IEEE, 2022
- 28. Injy Hamed, Amir Hussein, Oumnia Chellah, Shammur Chowdhury, Hamdy Mubarak, Sunayana Sitaram, Nizar Habash, and Ahmed Ali. Benchmarking evaluation metrics for code-switching automatic speech recognition. In 2022 IEEE Spoken Language Technology Workshop (SLT), 2022

- 29. Shammur Absar Chowdhury, Amir Hussein, Ahmed Abdelali, and Ahmed Ali. Towards One Model to Rule All: Multilingual Strategy for Dialectal Code-Switching Arabic ASR. In *Proc. of the 22nd Annual Conference of the International* Speech Communication Association (INTERSPEECH), 2021
- 30. Ahmed Ali, Shammur Chowdhury, Amir Hussein, and Hifny Yasser. Arabic Code-Switching Speech Recognition using Monolingual Data. In *Proc. of the 22nd Annual Conference of the International Speech Communication Association (INTERSPEECH)*, 2021
- 31. Hamdy Mubarak, Amir Hussein, Shammur Absar Chowdhury, and Ahmed Ali. QASR: QCRI Aljazeera Speech Resource. A Large Scale Annotated Arabic Speech Corpus. In *Proc. of the 59th Annual Meeting of the Association for Computational Linguistics (ACL)*, 2021
- 32. Ahmed Ali, Shammur Chowdhury, Mohamed Afify, Wassim El-Hajj, Hazem Hajj, Mourad Abbas, Amir Hussein, Nada Ghneim, Mohammad Abushariah, and Assal Alqudah. Connecting Arabs: bridging the gap in dialectal speech recognition. *Communications of the ACM*, 64(4):124–129, 2021. Publisher: ACM New York, NY, USA
- 33. Firoj Alam, Arid Hasan, Tanvir Alam, Akib Khan, Janntatul Tajrin, Naira Khan, and Shammur Absar Chowdhury. A review of bangla natural language processing tasks and the utility of transformer models. *arXiv e-prints*, pages arXiv–2107, 2021
- 34. Amir Hussein, Shammur Chowdhury, and Ahmed Ali. KARI: KAnari/QCRI's End-to-End systems for the INTER-SPEECH 2021 Indian Languages Code-Switching Challenge. *arXiv preprint arXiv:2106.05885*, 2021
- 35. Joni Salminen, Soon-Gyo Jung, Shammur Chowdhury, Dianne Ramirez Robillos, and Bernard Jansen. The ability of personas: An empirical evaluation of altering incorrect preconceptions about users. *International Journal of Human-Computer Studies*, 153:102645, 2021. Publisher: Academic Press

36. Bernard J Jansen, Soon-gyo Jung, Shammur A Chowdhury, and Joni Salminen. Persona analytics: Analyzing the stability of online segments and content interests over time using non-negative matrix factorization. *Expert Systems with Applications*, 185:115611, 2021

- 37. Shammur Absar Chowdhury, Ahmed Ali, Suwon Shon, and James Glass. What does an end-to-end dialect identification model learn about non-dialectal information? In *Proc. of the 21st Annual Conference of the International Speech Communication Association (INTERSPEECH)*, 2020
- 38. Shammur Absar Chowdhury, Younes Samih, Mohamed Eldesouki, and Ahmed Ali. Effects of dialectal code-switching on speech modules: A study using egyptian arabic broadcast speech. In *Proc. of the 21st Annual Conference of the International Speech Communication Association (INTERSPEECH)*, 2020
- 39. Shammur Absar Chowdhury, Hamdy Mubarak, Ahmed Abdelali, Soon-gyo Jung, Bernard J Jansen, and Joni Salminen. A multi-platform arabic news comment dataset for offensive language detection. In *Proc. of The 12th Language Resources and Evaluation Conference*, pages 6203–6212, 2020
- 40. Shammur Absar Chowdhury, Ahmed Abdelali, Kareem Darwish, Soon-gyo Jung, Joni Salminen, and Bernard J Jansen. Improving arabic text categorization using transformer training diversification. In *Proc. of the WANLP (COLING)*, pages 6203–6212, 2020
- 41. Joni Salminen, Soon-Gyo Jung, Shammur Chowdhury, Sercan Sengün, and Bernard J Jansen. Personas and analytics: A comparative user study of efficiency and effectiveness for a user identification task. In *Proc. of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–13, 2020
- 42. Joni Salminen, Maximilian Hopf, Shammur A Chowdhury, Soon-gyo Jung, Hind Almerekhi, and Bernard J Jansen. Developing an online hate classifier for multiple social media platforms. *Human-centric Computing and Information Sciences*, 10(1):1, 2020
- 43. Joni Salminen, Kathleen Guan, Soon-Gyo Jung, Shammur A Chowdhury, and Bernard J Jansen. A literature review of quantitative persona creation. In *Proc. of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–14, 2020
- 44. Md Arid Hasan, Jannatul Tajrin, Shammur Absar Chowdhury, and Firoj Alam. Sentiment classification in bangla textual content: A comparative study. In 2020 23rd international conference on computer and information technology (ICCIT), pages 1–6. IEEE, 2020
- 45. Joni Salminen, Rohan Gurunandan Rao, Soon-gyo Jung, Shammur A Chowdhury, and Bernard J Jansen. Enriching social media personas with personality traits: A deep learning approach using the big five classes. In *Proc. of the International Conference on Human-Computer Interaction*, pages 101–120. Springer, Cham, 2020
- 46. Joni Salminen, Soon-gyo Jung, Shammur A Chowdhury, and Bernard J Jansen. Rethinking personas for fairness: Algorithmic transparency and accountability in data-driven personas. In *Proc. of the International Conference on Human-Computer Interaction*, pages 82–100. Springer, Cham, 2020
- 47. Sabit Hassan, Younes Samih, Hamdy Mubarak, Ahmed Abdelali, Ammar Rashed, and Shammur Absar Chowdhury. Alt submission for osact shared task on offensive language detection. In *Proc. of the 4th Workshop on Open-Source Arabic Corpora and Processing Tools, with a Shared Task on Offensive Language Detection*, pages 61–65, 2020
- 48. Joni Salminen, Soon-gyo Jung, João M Santos, Shammur Chowdhury, and Bernard J Jansen. The effect of experience on persona perceptions. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–9, 2020
- 49. Soon-Gyo Jung, Joni Salminen, Shammur A Chowdhury, Dianne Ramirez Robillos, and Bernard J Jansen. Things change: Comparing results using historical data and user testing for evaluating a recommendation task. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–7, 2020
- 50. Joni Salminen, Soon-gyo Jung, Shammur Chowdhury, and Bernard J Jansen. Analyzing demographic bias in artificially generated facial pictures. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–8, 2020

- 51. Joni Salminen, Jukka Vahlo, Aki Koponen, Soon-Gyo Jung, Shammur A Chowdhury, and Bernard J Jansen. Designing prototype player personas from a game preference survey. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–8, 2020
- 52. Joni Salminen, Willemien Froneman, Soon-gyo Jung, Shammur Chowdhury, and Bernard J Jansen. The ethics of data-driven personas. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–9, 2020

- 53. Shammur Absar Chowdhury and Roberto Zamparelli. An Istm adaptation study of (un)grammaticality. In *Proc. of the ACL 2019 BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP, ACL*, 2019
- 54. Shammur Absar Chowdhury, Evgeny A Stepanov, Morena Danieli, and Giuseppe Riccardi. Automatic classification of speech overlaps: Feature representation and algorithms. *Computer Speech & Language*, 55:145–167, 2019
- 55. Arid Hasan, Firoj Alam, Shammur Absar Chowdhury, and Naira Khan. Neural vs statistical machine translation: Revisiting the bangla-english language pair. In *Proc. of the ICBSLP 2019*, 2019

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- 56. Shammur Absar Chowdhury and Roberto Zamparelli. Rnn simulations of grammaticality judgments on long-distance dependencies. In *Proc. of the 27th International Conference on Computational Linguistics (COLING)*, pages 133–144, 2018
- 57. Evgeny Stepanov, Stephane Lathuiliere, Shammur Absar Chowdhury, Arindam Ghosh, Radu-Laurentiu Vieriu, Nicu Sebe, and Giuseppe Riccardi. Depression severity estimation from multiple modalities. In 20th International Conference on e-Health Networking, Applications and Services (Healthcom), IEEE, 2018
- 58. Evgeny A. Stepanov, Shammur Absar Chowdhury, Ali Orkan Bayer, Arindam Ghosh, Ioannis Klasinas, Marcos Calvo, Emilio Sanchis, and Giuseppe Riccardi. Cross-language transfer of semantic annotation via targeted crowdsourcing: Task design and evaluation. *Language Resources and Evaluation Journal*, 2018
- 59. Shammur Absar Chowdhury, Firoj Alam, and Naira Khan. Towards bangla named entity recognition. In 2018 21st International Conference of Computer and Information Technology (ICCIT), pages 1–7. IEEE, 2018

## 2017

- 60. Shammur Absar Chowdhury, Evgeny Stepanov, Morena Danieli, and Giuseppe Riccardi. Functions of silences towards information flow in spoken conversation. In *Proc. of the Workshop on Speech-Centric Natural Language Processing*, *EMNLP*, pages 1–9, Copenhagen, Denmark, 2017
- 61. Shammur Absar Chowdhury, Firoj Alam, Naira Khan, and Sheak RH Noori. Bangla grapheme to phoneme conversion using conditional random fields. In *Proc. of 20th International Conference on Computer and Information Technology (ICCIT)*, pages 1–6. IEEE, 2017
- 62. Shammur Absar Chowdhury and Giuseppe Riccardi. A deep learning approach to modeling competitiveness in spoken conversation. In *Proc. of International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, 2017

- 63. Firoj Alam, Shammur Absar Chowdhury, Morena Danieli, and Giuseppe Riccardi. How interlocutors coordinate with each other within emotional segments? In *Proc. of COLING: International Conference on Computational Linguistics (COLING)*, 2016
- 64. Firoj Alam, Shammur Absar Chowdhury, and Sheak Rashed Haider Noori. Bidirectional lstms—crfs networks for bangla pos tagging. In *Proc. of 19th International Conference on Computer and Information Technology (ICCIT)*, pages 377–382. IEEE, 2016

- 65. Shammur Absar Chowdhury, Evgeny Stepanov, and Giuseppe Riccardi. Predicting user satisfaction from turn-taking in spoken conversations. In *Proc. of 17th Annual Conference of the International Speech Communication Association (INTERSPEECH)*, 2016
- 66. Shammur Absar Chowdhury, Evgeny A. Stepanov, and Giuseppe Riccardi. Transfer of corpus-specific dialogue act annotation to iso standard: Is it worth it? In *Proc. of LREC*, 2016
- 67. Giuseppe Riccardi, Evgeny A Stepanov, and Shammur Absar Chowdhury. Discourse connective detection in spoken conversations. In *Proc. of International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, pages 6095–6099. IEEE, 2016

- 68. E Stepanov, Benoit Favre, Firoj Alam, S Chowdhury, Karan Singla, Jeremy Trione, Frederic Béchet, and Giuseppe Riccardi. Automatic summarization of call-center conversations. In *Proc. of the IEEE Automatic Speech Recognition and Understanding Workshop (ASRU 2015)*, 2015
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