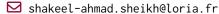
# Shakeel Ahmad Sheikh

#### PhD Student, Inria Research









### **Research Interests**

Artificial Intelligence, Natural Language Processing, Deep Learning, Visual Speech Processing, Health Informatics

#### **Education**

2019 – 2023 Ph.D., Universite De Lorraine, Multispeech, Inria Research, France.

Thesis title: Identifying Speech Disorders (Stuttering) in Speakers with Stuttering, and its Rehabilitation, using Deep Learning.

2018 – 2019 M.S. Computer Science, Grenoble Alps University, France.

Thesis title: Neural Machine Translation in Low Resource Settings Using pre-trained Contextual Embeddings.

2017 – 2019 M.S. Computer Science, Istanbul University, Turkey.

Thesis title: Intelligent Clustering of Authentic Religious Texts based on Contextual Similarity Using Deep Learning, CGPA: 3.67/4, Rank 1.

Bachelor of Technology, University of Kashmir, India.

Computer Science & Engineering, CGPA: 83.48/100, Rank 1, Gold Medalist.

## **Courses and Summer Schools**

### **Deep Learning & NLP Summer Schools**

July-2022 DeepLearn Summer School 2022 DeepLearn2022, Spain.

Organized by: ULPGC, Universitat Rovira i Virgili, IRDTA, Gran Canaria, Spain.

Jan -2021 Advanced Language Processing School 2021, France.

Organized by: LIG (Univ. Grenoble Alpes) and Naver Labs Europe, France.

July-2020 Lisbon Machine Learning Summer School 2020, LxML2020, Portugal.

Organized by: IST, INESC-ID, Unbabel, Priberam Labs and Cleverly, Spain.

Aug-2020 Oxford Machine Learning Summer School 2020 OxML2020, UK.

Organized by: AI for Global Goals and in partnership with Oxford Saïd Business School, Oxford Deep Medicine Program, and Canada CIFAR, UK.

#### **Online Courses**

Apr-2020: Natural Language Processing in TensorFlow by deeplearning.ai on Coursera, Certificate

Deep Neural Networks with PyTorch with IBM on Coursera with IBM on Coursera, Certificate

Sep-2019: Convolutional Neural Networks in TensorFlow, deeplearning.ai Certificate

Aug-2019: Introduction to TensorFlow for AI, ML, and DL, deeplearning.ai Certificate

Oct-2018: Machine Learning by Stanford University on Coursera, Certificate

Sep-2018: Neural Networks and Deep Learning by deeplearning.ai on Coursera, Certificate

Aug-2017: A Crash Course in Data Science by Johns Hopkins University Certificate

## **Work Experience**

## **Employement History**

Jan-2019-Jun-2019: **NLP Internship**, Grenoble, France.

LIG Research Lab, Neural Machine Translation in Low Resource Settings Using Pre-Trained Contextual Embeddings.

2015–2016: **Database cum QAC Engineer**, JK, India.

BQE Software Inc..

## **Work Experience (continued)**

#### **Projects**

2019:

Robotics and IoT: Balloon Detection and Obstacle Avoidance in C++ & ROS.

Human Computer Interaction Project: Hotel for Pets.

Regalia Database Design and Schema in ORACLE

Chat Application in JAVA.

NachOS Operating System Design in C & C++.

Babble: Thread Server in C. Virtual Memory Allocator in C.

StutterNet (Private Repo) in Python and PyTorch.

#### **Research Publications**

### **Journal Articles**

- 1 Sheikh, Shakeel Ahmad, Sahidullah, M., Hirsch, F., & Ouni, S. (2022a). Advancing Stuttering Detection via Data Augmentation Class-Balanced Loss and Multi-Contextual Deep Learning. *Under Review in Journal of IEEE Biomedical Informatics*.
- 2 Sheikh, Shakeel Ahmad, Sahidullah, M., Hirsch, F., & Ouni, S. (2021a). Machine Learning for Stuttering Identification: Review, Challenges & Future Directions. *Accepted in Journal of Neurocomputing (IF = 5.17)*. Retrieved from 6 https://arxiv.org/abs/2107.04057

## **Conference Proceedings**

- Sheikh, Shakeel Ahmad, Sahidullah, M., Hirsch, F., & Ouni, S. (2022b). End-to-End and Self-Supervised Learning for ComParE 2022 Stuttering Sub-Challenge. In *Proc. of 2022 30th ACM International Conference on Multimedia (ACMMM2022)*. Retrieved from https://hal.archives-ouvertes.fr/hal-03728331
- 2 Sheikh, Shakeel Ahmad, Sahidullah, M., Hirsch, F., & Ouni, S. (2022c). Introducing ECAPA-TDNN and Wav2Vec2.o Embeddings to Stuttering Detection. In *Preprint 2022*. Retrieved from <a href="https://arxiv.org/abs/2204.01564">https://arxiv.org/abs/2204.01564</a>
- 3 Sheikh, Shakeel Ahmad, Sahidullah, M., Hirsch, F., & Ouni, S. (2022d). Robust Stuttering Detection via Multi-task and Adversarial Learning. In *Proc. of 2022 30th European Signal Processing Conference (EUSIPCO)*. Retrieved from 6 https://hal.archives-ouvertes.fr/hal-03629785
- 4 Sheikh, Shakeel Ahmad, Sahidullah, M., Hirsch, F., & Ouni, S. (2021b). StutterNet: Stuttering Detection Using Time Delay Neural Network. In *Proc. of 2021 29th European Signal Processing Conference (EUSIPCO)* (pp. 426–430). 6 doi:10.23919/EUSIPC054536.2021.9616063

#### **Technical Reports**

1 Sheikh, Shakeel Ahmad, & Besacier, L. (2019). Neural Machine Translation in Low Resource Settings using Pre-Trained Contextual Embeddings, LIG, Grenoble, France.

#### Skills

Languages

Kashmiri (Mother Tongue), English, Turkish, Arabic (Basic), Urdu, French (Learning).

Coding

PYTHON, C, C++, JAVA, MySQL, TCL, HTML, Fortran, LATEX.

Tools

PyTorch, TensorFlow, Git, Matlab, Octave, Numpy, Keras, Pandas, Scipy, Sckit-Leaarn, NLTK, OpenNMT, OpenMP, OpenMPI, ROS (basics)

## **Honours and Awards**

2021

Gold Medalist

## **Honours and Awards (continued)**

French National Research Agency (ANR) Scholarship
PhD Research, Universite de Lorraine, CNRS, Inria, LORIA, France.

■ University Scholarship
PhD Research, China University of Petroleum, China.

Nomination for Chinese Government Scholarship, MS

Nomination for Korean Government Scholarship, MS

Winner of Turkish Government Scholarship MS, Istanbul University, Turkey.

2015 Gate Exam

Qualified Nationwide Gate in Computer Sciences.

2010 HSC Rank  $2^{nd}$  in Mathematics
Achieved  $2^{nd}$  Rank in Mathematics in HSC (Kashmir State).

## References

Available on Request