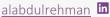
# 212-G, SRA, Multan, Pakistan 🙃 (+92) 3317141759 📞





https://tabahi.github.io/about @

## ABDUL REHMAN



#### **OBJECTIVE**

I am currently a final year Master's student at CUG, Wuhan, China. I am looking for PhD opportunities to continue my research career in fields related to speech processing, HCI and Machine Learning.



#### **EDUCATION**

### Masters in Control Science and Engineering | CUG, Wuhan, China

SEP 2018 – JUN 2021

(1yr courses, 2yrs research) Thesis: Speaker Independent Speech Emotion Recognition with Active Learning

- Second prize in CUG's postgraduate research awards, 2020
- Bronze prize in China's 5<sup>th</sup> Internet+ Innovation and Entrepreneurship Competition, 2019

#### BS in Electrical Engineering | PIEAS, Islamabad, Pakistan

OCT 2010 - JAN 2015

Thesis: RF RSSI based outdoor localization



#### **WORK EXPERIENCE**

#### Design Engineer | Comcept (Pvt) Limited, Islamabad, Pakistan

Sep 2015 – Aug 2017 | R&D, design and development of hardware and software for military equipment.

#### Technical Lead | QRS Personalization Factory, Wuhan, China

Jun 2019 – Sep 2020 | An IoT/HCI startup that ran out of funding.

Freelance portfolio & reviews at: pph.me/tabahi



#### **PUBLICATIONS**

Speech Emotion Recognition Based on Formant Characteristics Feature Extraction and Phoneme Type Convergence

Journal: Information Sciences

2021, Zhen-Tao Liu; Abdul Rehman; Min Wu; Weihua Cao; Man Hao

Speech Personality Recognition Based on Annotation Classification Using Log-likelihood Distance and Extraction of Essential Audio Features

Journal: IEEE Transactions on Multimedia

2020, Zhen-Tao Liu; Abdul Rehman; Min Wu; Weihua Cao; Man Hao

Cross-Corpus Speech Emotion Recognition Based on Hybrid Neural Networks

| Conference: CCC2020

2020, Abdul Rehman; Zhen-Tao Liu; Dan-Yun Li; Bao-Han Wu

Speech Emotion Recognition Based on PSO-SVR Using Personality Clusters

| Conference: IWACIII2019

2020, Abdul Rehman; Zhen-Tao Liu; Min Wu; Weihua Cao; Man Hao



- Programming: Python, C, C#, JS
- ML: TensorFlow, PyTorch, MATLAB, Keras
- **EE:** Signals, RF, Sensors, IoT
- **Research:** Stats, Writing, LaTeX, Peer reviewing

#### Languages:

o English: Advanced, TOEFL 106/120

o Chinese: Intermediate, HSK4

o Urdu: Native



#### **PROJECTS**

These are few projects that I have worked on independently or at the job:

#### Automated psych diagnostic system

SEP 2020 - CURRENT

Our university is building an HCI psychological diagnostic system, I am responsible for the speech and affect recognition part of that system.

#### Recognition of cross-lingual symbols in speech

SEP 2018 - CURRENT

Thesis project. My goal is to figure out the emotional symbols in speech that are independent of the lexicon of a certain language group to recognize speech emotions cross-culturally.

#### Al based forecast from CO2 sensors and Satellite data

APRIL 2017 - MAY 2017

Programming of weak-AI based prediction of crop yield. Application monitors and triggers the alarm when CO2 is increasing rapidly in cities or agricultural areas to predict a forthcoming drought.

#### Autoloader control system

MARCH 2017 - AUG 2017

I designed the whole control mechanism of a loading robot that replaces one of the crew members inside the tank.

#### Road snow melting IoT system

MAY 2017 - JULY 2017

IoT electronics and Web based control panel for Arctic highways in Norway. Simple project but a lot of moving parts in it.

#### • Fire (projectile) control system

JULY 2016 - JULY 2017

I was part of a team which designed the whole firing system for a military tank. My task was to design instruments to sense the environment wind, fog, trees, gravity etc.

#### Laser based target locker

DEC 2015 - JULY 2016

Detection of target distance, material and surrounding environment using a high-power laser.

#### Long range passive LF metal detector

JAN 2017 - SEP 2017

Detection of 10m deep underground metal tags using passive RF.

#### Remote fuel gauging system for air fuel tankers

JAN 2016 - MAY 2016

Remotely monitors the air fuel taker fleet. It is monitored by web-based user interface.

### • NMEA0186, NMEA2k, Seatalk multiplexer and decoder with remote nodes

NOV 2015 - JAN 2016

A device to merge all kind of sea instruments in one box. It uses multiple controllers and remote RF nodes to show all the ship's instruments on a single screen.

Some of my hobby projects are publicly available on GitHub: github.com/tabahi.