AJO Staff Member’s Research Paper Secured Best Papers Award
April 2020

Best Papers

#44 | Design of Alert App and related Device for Hearing Impaired Users in India and Afghanistan
Ganesh Bhutkar, Sumit Jadhav and Priyank Kularia
(Vishwakarma Institute of Technology); Mohammad Nasim
(Bakhtar University of Kabul)

#75 | A Study of Wearable Accelerometers Layout for Human Activity Recognition
Chengshuo Xia and Yuta Sugiura (Keio University)

#84 | CodeRhythm: A Tangible Programming Toolkit for Visually Impaired Students
Zhiyi Rong, Ngo Fung Chan, Tianzhou Chen, and Kening Zhu (City University of Hong Kong)

It is with immense pleasure to announce that the research paper of one of AJO’s staff members, Mr. Sayyed Mohammad Nasim Ibrahim, the Web Development & Database Expert, has been awarded the Best Papers award for the first position secured among 17 countries.

36 papers from 17 countries were presented from different world famous universities and professors. Mr. Ibrahim, who is pursuing his Masters Degree in Software Engineering from Bakhtar University in Kabul, presented his research paper on the “Alert Device and mobile Application for Hearing impaired users in South Asia( Specifically in India and Afghanistan)” and
secured first position as best paper award where the Japanese research team (Keio University) secured second and the Hong Kong research team (City University of Honk Kong) secured third position.

This research was done by a team of experts from India and Afghanistan. Mr. Ibrahim represented Afghanistan who did the survey and analysis of the data with the mobile application development from Afghanistan side.

This research paper was supposed to be presented physically in island of Oahu, Hawaii, USA at the end of April-2020, but due to the COVID-19 pandemic, the presentation took place online and the awards announce online as well.

**ABSTRACT of the paper:**

Most of the sounds such as the ringing of the phone, crying of a baby, doorbell, fire alarm and others are vital for everybody in day-to-day life to hear. People with hearing impairment have difficulties in recognition of these sounds. This paper discusses a prototype design of Alert Device and related mobile phone app for hearing impaired users in their home environment. The prototype related design of both Alert Device and Mobile Prototype is designed based on a detailed literature survey as well as mobile app review. The prototype device design includes several important features such as detection of doorbell, crying of a baby, fire alarm, motion detection alarm, phone ringing, self-training of sound, SOS / Panic button and sound log. This device provides alert information on the mobile phone, tablet or smartwatch. In the future, the proposed alert app and related device will be developed with a focus to make it suitable for countries in South Asia and whole of Asia.

**About the The Asia CHI Symposium:**

The Asia CHI Symposium showcases to the latest HCI work from Asia, the Asian diaspora and those focusing on incorporating Asian sociocultural factors in their design and implementation. Aside from circulating ideas, identifying
emerging research problems and envisioning future directions in human-computer interaction research, this symposium aims to foster social ties among academics (researchers and students) and practitioners and continuously grow a research community in Asia.

About AJO

The Afghanistan Justice Organization (AJO) is an Afghan-led, non-profit, and non-partisan organization promotes democracy, governance and rule of law through project design and management, project performance and evaluation, training and capacity development, policy research and analysis, and public awareness campaigns and advocacy.