



Press Release

To: Assignment Editor/Editor of Education, Local News, and Technology Sections

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HSUHK Scholar Develops Two Free Mobile Apps Leveraging AI to Facilitate Self-Learning of Languages

A research team from The Hang Seng University of Hong Kong (HSUHK) has successfully developed two free mobile applications, ‘SpokenBot’ and ‘ReadOutLoud’, for students and the larger public to improve their spoken and written English, and Putonghua. The team aimed to create a self-learning platform assisted by artificial intelligence (AI) engine and chatbot technology, develop interactive learning and self-improvement models, and create a more effective learning environment for users.

The app ‘SpokenBot’ helps users in three main areas: practising vocabulary, evaluating vocabulary pronunciation, and evaluating sentence pronunciation. It provides nearly 100 scenarios that are related to current affairs and society, including emerging technologies, digitalisation, and workplace situations. Over 8,000 groups of English vocabulary are available and divided into high, medium and low difficulty levels. Users can select the appropriate level, speed of sound, and even the accent of AI voice generator according to their ability. ‘SpokenBot’ will also update news headlines every day for users to read them out loud so that they can learn and prepare for tests such as the IELTS, as well as for their professional environments. Users can also customise the number of learning days to learn English by themselves through the chat robot.

Another app, ‘ReadOutLoud’, automatically downloads news content from radio stations and government news websites every day. It reads out relevant content in Putonghua or English through simulated AI voice generation technology. Upon hearing the content, users will be able to read the content through the recording function, and the AI engine will analyse the users’ pronunciation, to score and recommend words that can further improve their pronunciation.

Project coordinator, Dr Jack Wu Chun-ho, Programme Director of Management Science and Information Management (BMSIM) Programme of HSUHK, said the apps aim to help users improve their English skills and particularly address language issues such as vocabulary, sentence structure, pronunciation, ‘Chinglish’. “With the aim of allowing HSUHK’s students to practice conversing in English more actively and effectively, the Big Data Intelligence Centre of HSUHK has developed an interactive self-study programme, so that users can teach themselves the language anytime and anywhere. They can also improve themselves through the in-App feedback mechanism and suggestions. After a generative AI user guide is formulated in the coming future, the team expected to combine with the mobile application, to further enhance interactions, automatically generate more relevant suggestions for users to refer to, and further improve the level of conversation. In the long run, the team hopes to drive the ‘Start - Listen - Read – Respond’ learning mode and open up intelligent learning paths.”

Zhou Yuki, a Year 4 Management Science and Information Management Programme student shared, “SpokenBot enabled me to learn a lot of vocabulary. The words and sentences provided

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香港新界沙田小瀝源行善里 Hang Shin Link, Siu Lek Yuen, Shatin, New Territories, Hong Kong

電話Tel 3963 5000 傳真Fax 3963 5332 網址Website www.hsu.edu.hk



are relevant for different scenarios. SpokenBot also allows me to improve my English pronunciation through reading, which is more useful than simply memorising English words or phrases. It also helped me learn words that are related to today's conversations and trends, such as new technology, which helps me keep up to date.”

Another user, Judy Zhang, a Year 4 Management Science and Information Management Programme student, found ‘ReadOutLoud’ to be very useful, saying “In addition to improving my English reading ability, with ‘ReadOutLoud’, my spoken English has also improved. I am also getting more familiar with words that often appear in the news, which helps me stay informed and learn new things every day.”

The projects were funded by the Education Bureau under the ‘Quality Enhancement Support Scheme’ and ‘HSUHK Teaching Development Grants’ respectively.

Photos:



Photo 1: Photo shows Dr Jack Wu (left), his students Yuki (right) and Judy (centre), which are the users of ‘SpokenBot and ‘ReadOutLoud’.

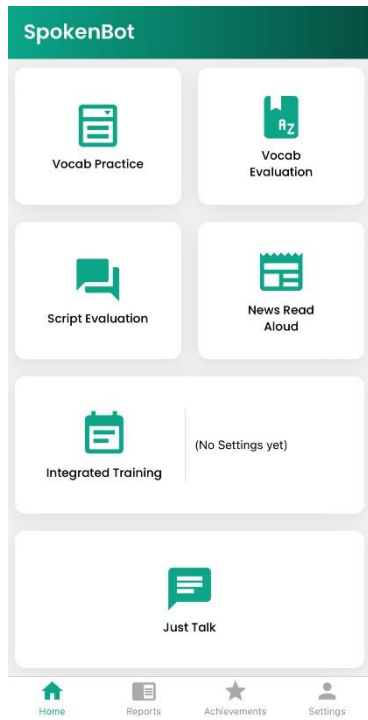


Photo 2: ‘SpokenBot’ provides three major functions: practicing vocabulary, evaluating vocabulary pronunciation, and evaluating sentence pronunciation.

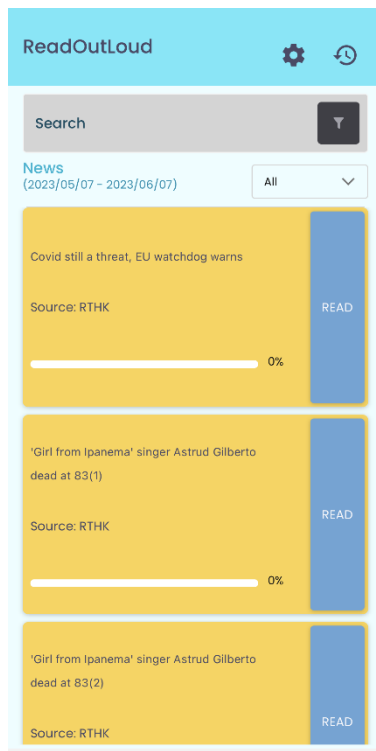


Photo 3: ‘ReadOutLoud’ automatically downloads daily news content from radio stations and government news websites and reads out relevant content in Mandarin or English through simulated AI voice generation technology.

Photos Download: <https://bit.ly/3ITXjwi>



香港恒生大學
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About The Hang Seng University of Hong Kong

The Hang Seng University of Hong Kong (HSUHK) is a non-profit private liberal-arts-oriented university with five Schools (Business, Communication, Decision Sciences, Humanities and Social Science, and Translation and Foreign Languages) and over 6,000 full-time students. Adopting the unique “Liberal + Professional” education model, HSUHK aims to nurture young talent with critical thinking, innovative minds, caring attitudes, moral values and social responsibility.

Aspiring to be a leading private university in the region, HSUHK features a primary focus on undergraduate education, top-quality faculty members, award-winning green campus facilities, innovative degree programmes, unique residential college system combining living and learning, interactive small class teaching, very close student-teacher relationship, RGC-funded impactful research, and excellent student development/support services. HSUHK is listed the 7th (overall) in the ASEAN+ region, the 1st in the Greater China region, and the 1st in Employability as per the 2023 AppliedHE ASEAN+ private university assessment by the Singapore-based AppliedHE. It is also listed among the top 200 worldwide on “Quality Education” and “Decent Work and Economic Growth” in the Times Higher Education University Impact Rankings 2021.