

兩老表創即時翻譯軟件 盼為聽障學子解困

# Cousins Develop Real-time Interpreting Software for Students with Hearing Impairment

**Voiceless - Kelvin Chan & Henri Chan**

撰文 當文尼



這天陳昌奇 (Kelvin) 穿著藍色恤衫，戴著眼鏡，拿著手提電腦，笑容滿面迎來，乍眼有種年輕有為的感覺。坐下來，Kelvin投以誠懇的目光，緩緩地逐字逐字說出他所想，即使相對不太順暢。其實Kelvin是一位先天完全失聰的聽障人士，同時也是一位碩士生、社企創業家，正研發便利於聽障社群學習的即時翻譯工具。「我希望大家可以溝通到。」Kelvin在表弟陳震義 (Henri) 協助下，道出對Voiceless的遠景。

The day we met, Kelvin was wearing a blue-collar shirt and glasses with a laptop in his hand. He walked towards me with a confident smile, looking like a successful young man. He sat down, looked me in the eyes sincerely and started to tell me his vision slowly word by word, though not very fluent. Kelvin suffers from congenital deafness. He is also a master's degree holder and a social entrepreneur who is developing a real-time interpretation tool that helps the hearing impaired community to have a better learning experience. "I hope we can all communicate with one another." Kelvin, with the help of his cousin Henri, spelt out his vision of "Voiceless".

## 澳洲成長回香港：港聽障配套落後

澳洲成長的Kelvin，在當地完成商科學士學位後，約在五年前回流香港，「澳洲生活很悶，香港多一點挑戰。」回來後，他修讀資訊科技碩士。

在Kelvin眼中，澳洲生活節奏慢，人們說話也慢，日常他能夠透過讀唇與人正常溝通。加上澳洲政府會為聽障人士提供資助，聘請「翻譯員」，翻譯員會即時用電腦打字把課堂內容逐句顯示，所以他在當地讀書未有遇到困難。但回到香港，城市急促運作下，人們無耐性，語速太快又中英夾雜，令他讀唇時相當吃力。在大學課堂上，他只能看課堂筆記、電子簡報及網上視頻自修，卻經常碰壁。對普通人而言也感艱難的求學路，Kelvin註定要花上更多氣力完成。

雖然擁有高學歷，但並不代表他在香港職場上得到友善對待。他試過被同事欺負而「食死貓」，屢遇阻滯、歧視。生活不盡如人意，Kelvin想過自我放棄。「無信心、無心機……很難令自己開心。」但霎眼他又將所有不快拋諸腦後，更揚

言短期不打算回澳洲。「我好open minded (隨和)，會調節至香港culture應對。」Kelvin說話時，總帶著親切的笑容。

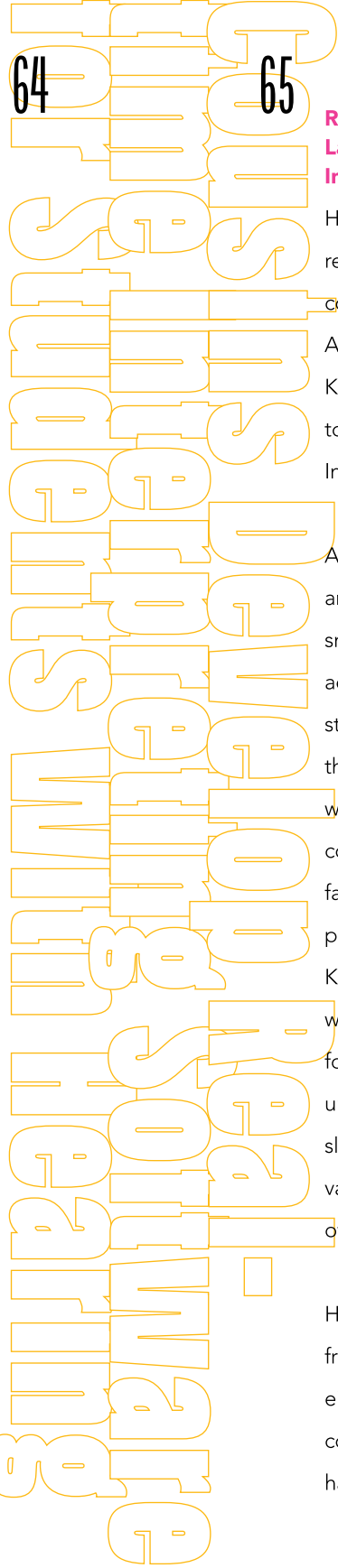
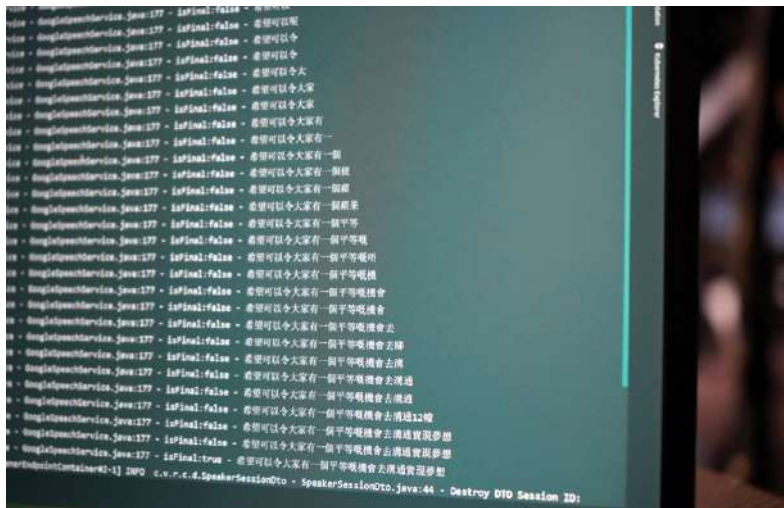
## 從自身出發 盼助聽障學子

Kelvin性格豁達，並深明溝通的重要性，他不想其他聽障人士，特別是聽障學童，有他這樣的經歷。他希望運用自身的知識，建構聽障人士與外界溝通的橋樑。於是他和表弟陳震義 (Henri) 成立社企「默聲」(Voiceless)，參考他在澳洲的讀書經驗，研發專為聽障人士而設的即時語音傳譯平台。

使用者只要將講話錄音上載平台，便能即時轉化成文字。平台又提供翻譯影片語音的功能，更貼心地附加時間標記(timestamp)，好讓用家更清楚了解內容。Henri表示，傳譯技術主要靠AI運作，目前準繩度達七成。

目前網站後台的工程(backend)已設計完畢，不日將正式公開。不過當初要完成Voiceless的雛形亦非易事，兩表兄弟表示，若要把Voiceless

做好，要投放不少資金，例如伺服器、AI等，每一樣都十分昂貴。幸好，Voiceless贏得Good Seed評審認同，得到了一筆可觀起動資金。對他們而言，這筆資金形同及時雨，讓Voiceless有機會面世，幫助有需要的人。



## Returning to Hong Kong from Australia: Lack of Support for People with Hearing Impairment

Having grown up in Australia, Kelvin decided to return to Hong Kong around 5 years ago after completing his Bachelor of Business Degree in Australia. "Life was boring in Australia. Hong Kong would be more challenging." He came back to Hong Kong to study for a Master's Degree in Information Technology.

Australians tend to have a slow-paced lifestyle and speak slowly, allowing Kelvin to communicate smoothly with people through lip-reading. In addition to that, the Australian government assists students with hearing impairment by providing them with an interpreter at school. The interpreter would type out the content of the lesson on a computer, which helped Kelvin a lot. But here in fast-paced Hong Kong, people are generally less patient. In addition to the hectic lifestyle, Hong Kong people tend to mix Cantonese with English when they speak, making lip-reading very difficult for Kelvin. He could only try his best to catch up at university by reading lecture notes, presentation slides and online videos, but his efforts were in vain. Completing a master's degree requires a lot of hard work, and even more so in Kelvin's case.

His education qualifications did not guarantee friendly treatment in Hong Kong workplaces either. He was bullied and discriminated by his colleagues. Kelvin once thought of giving up. "I had no confidence and no motivation. I couldn't

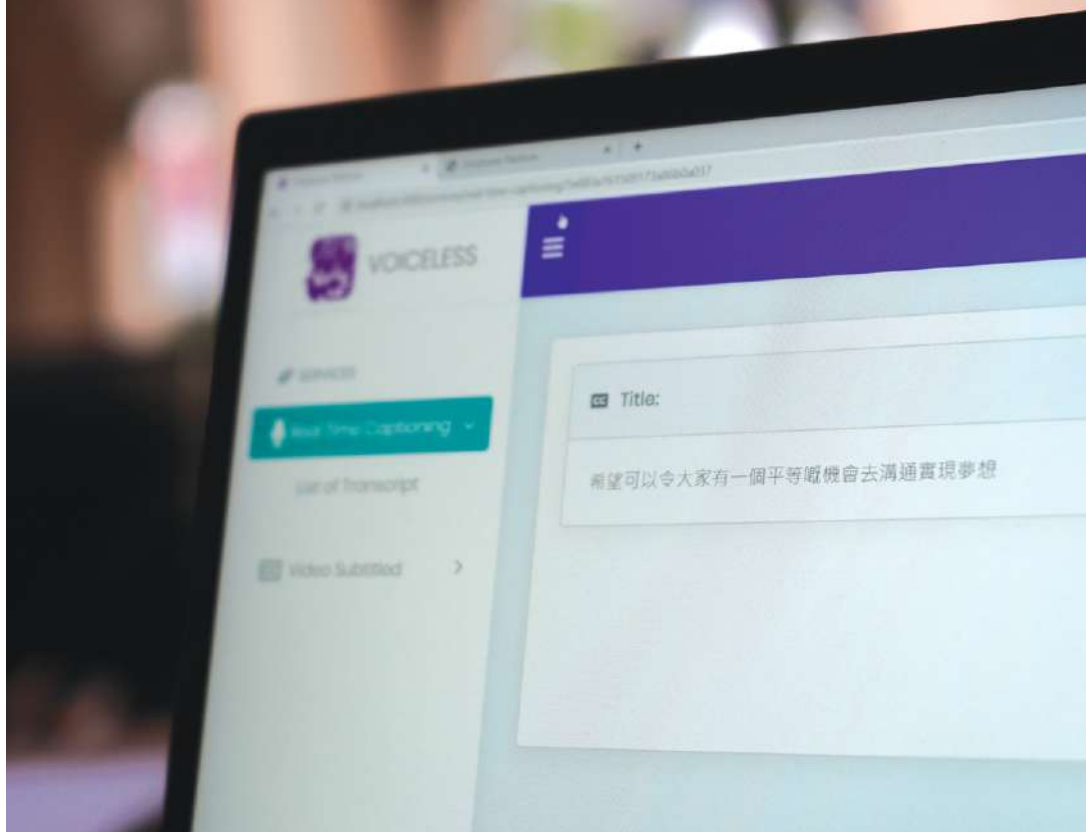
make myself happy." But in the blink of an eye, he managed to pick himself up and said that he had no plans to return to Australia anytime soon. "I am open minded. I will adjust to fit into the Hong Kong culture," said by Kelvin with his signature smile.

## Dedicated to Help Students with Hearing Impairment Based on Personal Experience

Kelvin's optimistic personality has rescued him from difficult times, and he understands the importance of communication. He does not want other people with hearing impairment, especially students, to go through what he went through. He wants to apply his knowledge to build a bridge between the hearing impaired and the world. Therefore, Kelvin and his cousin Henri established a social enterprise called "Voiceless", which is a real-time audio interpretation platform for people with hearing impairment, developed based on his experience in Australia.

Users can simply upload audio recordings onto the platform to have it converted into text in real time. The platform can also interpret video clips, with timestamps for better understanding. Henri pointed out that the interpretation technology mainly relies on AI, which is currently around 70% accurate.

The backend design of the website has now been completed and the platform will be launched soon. The process of making the prototype of "Voiceless" was not easy. The cousins noted



### 既是老表也是拍檔

訪問席間，Kelvin能道出如此多想法，全靠表弟Henri一直在旁擔當「傳譯人」。Henri總是靜靜地坐在一旁，讓表哥主導發言。他不時留意着表哥眼神，又會將問題簡單化，耐心重複數次轉達，甚至用紙筆「寫到你明」，當對話出現錯誤理解，他又會自動自覺補充解釋。

同樣在澳洲讀書、完成法律學位後回港的Henri說，在他和家人眼中，表哥是一個很聰明的人，而聽障人士的智力與常人無異，卻得不到公平的教育。「法律中有一個概念是公平。聽障人士只是天生有缺陷，但社會上沒有一個公平、平等的

機會，讓他上學、就業。」基於這一份理解，他決定擔當表哥副手，即使不熟悉電腦工程設計，也加入Voiceless，負責日常行政工作，幫助更多有需要的人。

「開心、有信心、大家平等、opportunity(機會)、better future(更好的未來)……」問到期望Voiceless為社會帶來甚麼，Kelvin緩緩道出他的想法。說畢，Henri隨即歸納表哥的意思：「希望Voiceless可以令大家開心一點、有信心一點，以及提供一個平等機會去溝通、發展和工作。」

66

67

that to ensure the quality, a lot of money had to be invested in the server and the AI technology. Fortunately, "Voiceless" won the recognition of Good Seed and received a substantial seed fund. To Kelvin and Henri, it was a timely fund that gave "Voiceless" a chance to help those in need.

### Cousins as well as Partners

During the interview, Kelvin was able to articulate all of his thoughts clearly with the help of his cousin, Henri, as the interpreter. Henri sat quietly by his side and patiently waited for him to finish his sentences. Henri paid close attention to Kelvin's expression, simplifying and repeating the questions when needed. He also helped with elaboration and clarifying misunderstandings.

Henri, who also studied in Australia and returned to Hong Kong after completing a Law Degree, said that he and his family see his cousin as a highly intelligent man. However, intelligent people with hearing impairment do not receive a fair education. "Fairness is an important concept in law. People with congenital hearing impairment are born like that without a choice, but the society did not provide them with a fair and equal opportunity to learn and work." With this understanding, Henri decided to work as his cousin's deputy at "Voiceless" despite not being familiar with computer engineering design. He is mainly responsible for the administrative work and aspires to help more people in need.

"Happiness, confidence, equality, opportunity, a better future..." These were the keywords uttered by Kelvin when asked about the vision of "Voiceless". Right after he stopped, Henri concluded, "We hope "Voiceless" can make everyone happier and more confident, and provide a fair opportunity for people to communicate, grow and work."