

50 years ago, I attended President Kimball's Second Century address in the Marriott Center as an undergrad. In his address, he remarked enthusiastically, "We look forward to developments in your computer-assisted translation projects." I was working on those projects as a student researcher! That BYU experience launched my 50-year career working on machine translation at IBM, Microsoft, the Church's Translation Division, and now at BYU as a Computer Science professor. At Microsoft Research, I managed the development of the Microsoft Translator, which the Church uses to accelerate their translation process. At BYU, I am teaching and mentoring the next generation about this technology. One exciting project is working with BYU Speeches to automatically dub BYU devotionals in multiple languages. Another is gathering recordings of BYU Pathway students speaking in their native languages to create AI models that generate human-like speech in those languages. My students' and my work focuses on enabling anyone who speaks or signs a language to communicate with anyone else who speaks or signs another language, to spread the light of the gospel to every nation, kindred, tongue, and people, and especially to the underserved billions of people whose languages are not part of current AI models.