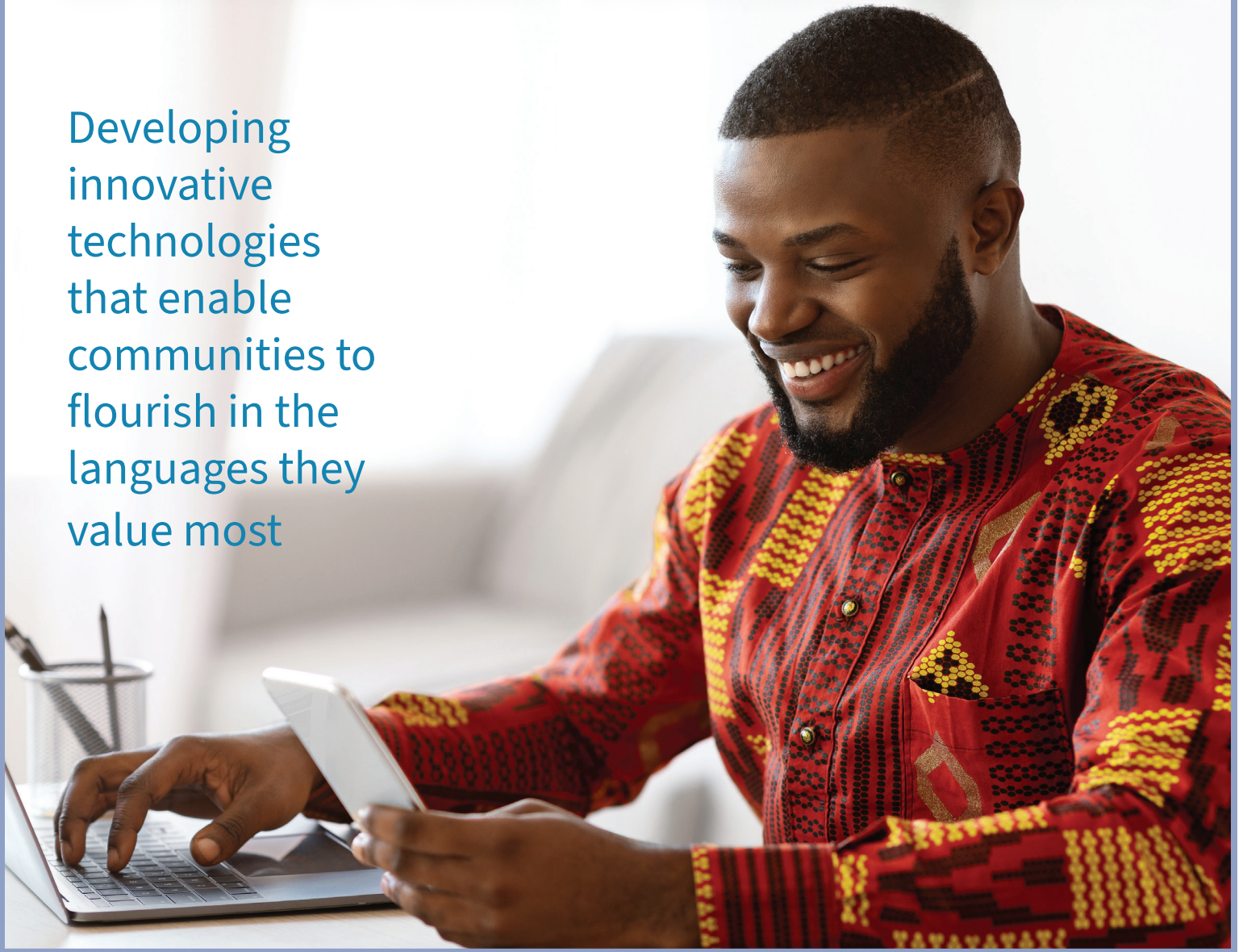# LANGUAGE TECHNOLOGY

Developing innovative technologies that enable communities to flourish in the languages they value most

DO YOU BELIEVE THAT:

All languages are of value and form an integral part of people's identity?

Every language has the potential to serve its speakers in a rapidly changing world?

Your software development and IT skills can help bring transformation for minority language communities worldwide?

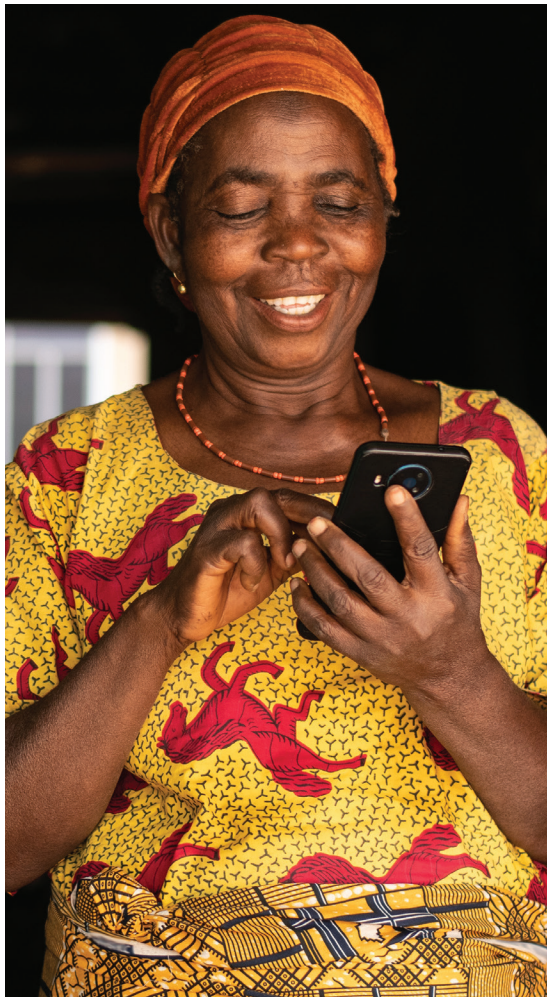*Your software skills and their languages are powerful tools to express God's love.*

SIL International has pioneered the use of technology to support language development for more than 40 years.

Translation software helps translators more quickly create first drafts, with built-in consistency checking tools, and translation resources easily obtained via the Internet.

Language survey software on mobile devices aids quick comparison of wordlists and facilitates language area boundary mapping.

Lexicography software allows language communities to more easily compile dictionaries that preserve and showcase their language.

Technology makes rapid distribution of translated materials possible, including completed Scriptures. In many countries, cell phones and other mobile devices are now a primary means of distributing Scripture. Technology also makes it easier to share related media in video and audio forms, increasing accessibility for oral cultures. Digital media is easily distributed, making technology-based distribution especially strategic where access is otherwise restricted.

NEEDED
Motivated self-starters who love Jesus and people and will work as part of a team to design, develop, and test software geared toward language-related work

TRANSLATION TOOLS

Paratext is the premier Bible translation tool used by more than 95% of all Bible translators around the world. Translators and project coordinators can use a wide variety of checking tools in Paratext and related programs to check the text for accuracy and consistency. Paratext Lite provides a nimble, mobile platform for Bible translation in the field.

ORAL BIBLE TRANSLATION

Audio Project Manager provides a flexible tool for those focused on orality with a customizable workflow, internalization resources that are audio or display oriented, threaded discussions, community checking, and back translation.

SCRIPTURE ENGAGEMENT

Scripture App Builder helps Bible translators build customized Scripture apps for Android and iOS smartphones and tablets. Once Scriptures have been checked, translators can then share the Scriptures with people, and they can be found in Google and Apple stores. Story Producer conveniently translates and records stories, creates videos, and then distributes those videos to all types of mobile phones and other devices.

LINGUISTIC TOOLS

Fieldworks Language Explorer (FLEx) enables linguists to be highly productive when building a lexicon and interlinearizing texts. It allows control of which fields and entries show up in a dictionary publication. A menu item provides for an easy upload to Webonary where language groups have the ability to publish bilingual or multilingual dictionaries on the web with minimal technical assistance.

LITERACY TOOLS

Prize-winning Bloom makes book production so simple that if you can type, you can make books. This way, even low-tech community members can quickly be equipped to start creating libraries for their language. Organizations use Bloom to create books that help children and adults around the world learn to read in their own language.

WEB COLLABORATION

Scripture Forge and Language Forge allow for easy collaboration on language and translation projects whereby whole language communities can get involved online. This opens up possibilities for expansion of the work team, increasing accuracy, and an increased sense of ownership in the final product.

Writing Systems

We want all living languages to have adequate computer support for the way they are written using scripts and alphabets. Adequate support includes software for keyboarding and data entry, text encoding, linguistic analysis, rendering, and publishing. Keyman helps you type in over 2000 languages on just about any digital device and even instantly in your web browser.

Natural Language Processing (A.I.)

With the challenges of limited corpi available in the working language, nonetheless, NLP can be useful in various checking phases in the Bible Translation methodologies used to help ensure a clear, accurate and natural sounding translated text. With completed New Testaments, NLP might accelerate the rough draft of complete Old Testaments that can be more easily refined.

Software Testing

As our software ecosystems grow, the need to find issues early in the development process grows. Building user trust requires predictable quality and release schedules. Developing technology with the appropriate balance of manual and automatic tests is key to the predictability of our products.

Operations

All this technology and software development needs to be supported to succeed. Facilities management, financial services, and IT support are key elements of our organization.

Training, Documentation, and Design

Our software products need attention to the overall user experience, with focus on details related not just to Western culture context, but a global perspective. This includes the user interface design, documentation, training, communications, marketing, and client support. There is considerable effort in localization of our software and training materials into regional majority languages.

Software Development Leadership

In a complex and remotely connected world via the Internet, international software development activities need more leadership than ever before, to keep projects on track and moving forward smoothly, working closely with collaborating organizations and funding agencies.

LANGUAGE TECHNOLOGY

How can you support the Bible translation movement through technology?

SERVE

Ask God if your skills and talents can directly serve language communities around the world.

GIVE

Ask God how you can give toward the work to bring His Word to language communities around the world.

PRAY

Pray that God will bring the needed people and finances to enable language projects to continue and expand.

Learn more about SIL's Language Technology projects at **https://software.sil.org** or email us at **languagetechnologycareers@sil.org**

SIL

HELPING LANGUAGE COMMUNITIES FLOURISH

WORK WITH A PURPOSE AND CALLING

As a software developer or IT professional you are uniquely called and gifted to be part of God's redemptive plan for the nations.

Preferred aptitudes and skills:

- Experience with the Software Development Lifecycle (SDL) using SCRUM or other agile methodologies

- Software Development and Testing - C#, React .NET, Mono, TypeScript, Node.JS, Angular, and others.

- Web Design - CSS, HTML, WordPress

- Web Services - AWS, Azure, Kubernetes

- UI/UX Design

- Natural Language Processing

- Training, Documentation, and Marketing

- Leadership and Project Management

Our software projects are open source and stored in GitHub repositories. In addition to full-time ministry team members, paid staff, and interns, we also need people who will volunteer their time to open source software development.

FIND OUT HOW GOD CAN USE YOUR SKILLS

- **Get acquainted:** Email languagetechnologycareers@sil.org to get connected with someone who can answer your questions and guide you forward.

- **Survey your skills:** Together we will explore your interests and skill set, and match you with the best available opportunities.

- **Consider full-time ministry, a paid position, or volunteering:** If you are interested in a full-time ministry position, we'll help you begin the process with one of our Wycliffe partners.*

FOR MORE INFORMATION

https://software.sil.org/serve

Email: languagetechnologycareers@sil.org

*To best use our resources, our ministry member staffing process is done in collaboration/partnership with the Wycliffe Bible Translators or other partner organizations in your country.

SIL is a global, faith-based nonprofit that works with local communities around the world to develop language solutions that expand possibilities for a better life. SIL's core contribution areas are Bible translation, literacy, education, development, linguistic research and language tools.

Photography: cover, Adobe Stock; back, Alan Hood; interior, Adobe Stock

© SIL International 2023

SIL International
7500 W. Camp Wisdom Road, Dallas, Texas 75236-5629 USA
Phone: 972 708-7400 | Contact: info_sil@sil.org
Website: www.sil.org

Version: 23.09