

“ People can succeed in whatever they want to do, especially with the help of technology. Bookshare has made my goals attainable and made it easier to pursue my education. ”

— GIRIDHAR, ENGINEERING STUDENT, CMR INSTITUTE OF TECHNOLOGY



## CHALLENGE

In 2017, Giridhar was pursuing a bachelor’s degree in engineering at CMR Institute of Technology in Bangalore, India. Halfway through the four-year program, he unexpectedly lost his sight due to a health complication. His life changed rapidly. How would he be able to read his course materials, especially the books containing technical equations and mathematical expressions? Recording his classes was time consuming and ineffective. Another challenge was converting the technical content in his course materials into a digital format that could be read by screen reader software. “I use an optical character recognition (OCR) reader to convert my books into Microsoft Word format, and then I use a DAISY player to read the text,” explains Giridhar. “This process is ineffective for books with charts and graphs because the headings get scattered around the Word document.”

## SOLUTION

He sought help from EnAble India, a nonprofit that provides services and resources for persons with disabilities, and Dr. Homiyar Mobedji, Program Manager for Bookshare Asia & Africa, who set him up with a Bookshare membership and helped him find academic books. Giridhar tried Thorium, a free EPUB reading application for Windows 10 that supports MathML and reads math expressions and technical equations. “Thorium can read the equations one by one, and that saves a lot of time.” Thorium allowed Giridhar to navigate through his course materials at his own pace, and the image descriptions increased his understanding. Giridhar uses a variety of devices to read: smartphone, tablet, computer and a DAISY player. “Most of my academic books are in English and available on Bookshare,” he says.

## IMPACT

As a result of his ability to read books in digital formats, he is on track to graduate. He plans to pursue a career in the field of sustainable energy, with an emphasis on electrical engineering and technology. He enjoys being self-sufficient and independent, and he can take his reading skills and tools with him on his career path.

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*Benetech is a nonprofit that empowers communities through software for social good. Our work transforms how people with disabilities read and learn, makes it safer for human rights defenders to pursue truth and justice, and connects people to the services they need to live and prosper. We’re constantly pursuing the next big social impact.*