The Boston Globe

UP CLOSE

Software program catches on with disabled individuals

By Cindy Cantrell GLOBE CORRESPONDENT DECEMBER 23, 2016



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James Gips

When Boston College made Camera Mouse available as a free download in 2007, codeveloper James Gips of Medfield hoped the assistive technology would help as many disabled individuals use computers as possible. Yet even

he is surprised by the enduring popularity of the software program, which recently exceeded 3 million downloads.

"It's an incredible number, because we do no advertising," said Gips, the Carroll School of Management Egan Professor of Computer Science at Boston College. "That was beyond my dreams."

Gips said the idea for Camera Mouse came about almost 20 years ago when he and former Boston College professor Margrit Betke — who now teaches computer science at Boston University — were working on an adaptive technology to follow EagleEyes, which uses electrodes to enable individuals to control any Windows computer with their eye movements. That led to Camera Mouse, through which users control the mouse pointer on their screen via a computer-connected webcam that tracks their head movements.

The technology was originally licensed by Boston College to a start-up company, but the commercial product, priced at \$395, did not sell well enough to be profitable. The free version available at cameramouse.org is funded by Boston College with support from the Philanthropy Committee of Mitsubishi Electric Research Labs (MERL) and the Mitsubishi Electric America Foundation.

While new versions and features are released regularly following user feedback, Gips said an unexpected challenge has been convincing skeptics that the program is free, "with no gimmicks or advertisements or registration."

Despite any initial misgivings, however, Camera Mouse was downloaded last month in 128 countries, most commonly the United States, Brazil, Italy, Germany, and nations in the European Union. Closest to home, EagleEyes and Camera Mouse are used at the Campus School at Boston College, a special education day school for ages 3 to 21 with complex learning and health care needs. "It's fabulous, all these people we're helping with this technology," said Gips, who posts some of the moving testimonials he receives to the website. "To hear from these people and their wonderful, dedicated caregivers that Camera Mouse is helping them, even changing their lives, is gratifying beyond words."

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