

Gates Scholar Aims to Revolutionize Computing

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Anthony Hylick doesn't want much out of life, only to help develop what could be the biggest revolution in computing since the Internet. Now, he'll have his chance. As Georgia Tech's latest recipient of the Gates Cambridge Scholarship, he'll begin pursuing his doctorate at the University of Cambridge this fall in the Sentient Computing research group.

A computer engineering major from Warner Robbins, Ga., Hylick said he wants to make computers easier to use for people who aren't computer experts. He doesn't mean just a little easier. He's thinking big - Dennis Hayes kind of big. Much like that Tech alumnus did with the computer modem in the late 1970s, Hylick wants to revolutionize the way computers communicate with each other and with users.

Sentient computers could be that revolution. Equipped with sensors that allow the computers to see and hear, they can communicate with each other through ultrasonic waves. They have the potential to fix themselves when things go awry and respond to changes in the environment, reducing the amount of tasks computer users have to do.

"I would like to develop a new type of hardware that totally changes the electronic field and will go on to benefit users that are not computer experts," Hylick told the Gates Cambridge committee.

"The computers could be useful in satellites, surveillance cameras, any system that's someplace where you don't want to have to go touch these

devices every time something goes wrong,” he said. “You want to have the assurance that if something does go wrong, it will be able to sustain itself and continue to function.”

Hylick said his research experience as an undergraduate at Tech has only increased his interest in changing the world. This past summer he worked with electrical and computer engineering Professor Ian Ferguson programming light-emitting diodes (LEDs) that can simulate sunlight. An LED uses less power than incandescent or fluorescent light bulbs and can adjust themselves to respond to changing lighting conditions.

Currently Hylick is the president and regional vice president for his fraternity, Kappa Alpha Psi, where he teaches young students through its mentoring programs.

"We have structured programs where we take young men, help them develop and encourage them to go to college. We try to give them that positive role model that they may not have," he said.

In between classes, research and his fraternity, Hylick has also found time to work. He currently works as a tech support specialist for the local service company I.T. Knowledge. Prior to that he participated in Tech's cooperative education program doing tech support for local schools at Virtucom.

Started with funds from the Bill and Melinda Gates Foundation in 2000, the Gates Cambridge Trust chooses approximately 100 students from across the globe to study at Cambridge University in England. The award covers the cost of tuition, airfare and a small stipend.

Source: Georgia Tech

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