

Georgia Tech studying Playstation chip for plane safety

By [DAVID HO](#)

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NEW YORK — A video game microchip may be the key to a system that keeps aging commercial and military airplanes structurally safe, GeorgiaTech's College of Computing plans to announce Thursday.

The research is among several projects being unveiled this week by an alliance of the institute's scientists and the technology companies Sony Corp., Toshiba Corp. and IBM Corp.

The work focuses on the Cell processor, which is the heart of the Sony PlayStation 3 game console but also has been used in fields such as medical research and oil exploration.

Georgia Tech's project plans to add to the list of Cell applications, first by developing software that uses the chip and a network of sensors to monitor how a plane's components vibrate in flight.

With aircraft in service getting older, understanding their condition and predicting mechanical problems becomes increasingly important, said DavidBader, executive director of high-performance computing at Georgia Tech.

"If you could have essentially an early warning system, you may be able to tell the pilot: 'There is an issue with the aircraft's health and you have an hour to land this plane before you'll have a catastrophic failure,'"Bader said.

The Cell processor's ability to process complex data combined with its gaming heritage also means that seat-back computers on planes could perform double duty as entertainment and safety devices, he said.

While a commercial product is the project's long-term goal, researchers are now focusing on developing the software in the lab, the university said.

The jointly developed Cell processor, built around technology from Armonk, N.Y.-based IBM, also powers some supercomputers and is often used to process detailed 3-D images.

Georgia Tech is hosting a workshop this week that focuses on ways Cell can be used in new industries and markets.

Researchers at the school's Sony-Toshiba-IBM Center of Competence are announcing seven pilot projects involving the chip. They include work on seismic monitoring, electronic financial services, secure communications and biology research.

David Ho is a New York correspondent for [Cox Newspapers](#).

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