

You, Robot: Exhibit examines technology, sociology and robotics with aids from ITaP

Those walking the hallway that connects the Purdue Memorial Union to Stewart Center in February likely noticed something that caught their eye ... just before it was reconstructed into a red-eyed robot glare.

“Robot Transformation” — which used a PC and camera configured by ITaP to overlay a robotic face on passersby — offered just one component of “Robots and Culture,” a student-created art exhibit examining ideas about technology and sociology related to robotics.



Hallway-display space at the Envision Center (ITaP’s visualization facility) offered a preview of “Robots and Culture,” which shares its name with assistant professor **Fabian Winkler**’s graduate-seminar **Art & Design course**.

But there’s more than met the eye during the early run of “Robots and Culture,” as the exhibit will be expanded at a larger, full off-campus exhibit Friday (April 23) and Saturday (April 24).

“These technologies must be looked at in a cultural context as they never exist in a vacuum,” says Winkler, an assistant professor of visual and performing arts in Purdue’s **Electronic and Time-Based Art** program. “What is the difference between ‘robots’ and ‘bots’? What does ‘robot’ actually stand for in our society? What ethics are entailed with robotics and nanotechnology?”

Mara Battiste, Nate Bench, Micah Bowers, Jordan Cleland, Esteban Garcia, Aaron Nemeč and David Wischer — all students in Winkler’s course — each had artwork displayed outside the Envision Center through early March and used an ITaP-maintained lab in studying, and build, robots for the class. ITaP is Purdue’s central information technology organization.

In addition to “Robot Transformation,” initial explorations showcased in the Envision Center space included:

- + “Galatea’s Golem” and “Fully Formed,” videos inspired by the entwinement of robotics and inanimate objects.
- + A sexual-objectification spin on **the Uncanny Valley**, which is a hypothesis regarding human revulsion at robots that look and act like humans do
- + A hand-drawn book of robots that could be created in the future.
- + The “Boomboxbot,” which separated out keyboard tones to their roots.
- + The projected ability of robots, by the year 2050, to engage in human methods of processing.

“We got overwhelmingly positive feedback,” Winkler says of the early exhibition. “These are ideas that many people haven’t thought about, developed with intent toward critical and controversial discussions. And it’s an indicator of success when it’s not just affirmative feedback, but criticism and discussion, which is honest feedback.”

“Robot Transformation,” “Galatea’s Golem” and “Fully Formed” will be featured at the expanded “Robots and Culture” exhibit. Among the additions to the full exhibit are:

- + “Phil,” a robotic groundhog fitted with light sensors that moves autonomously to avoid seeing its own shadow.
- + “DISCOBOT,” a robot decked out in a disco ball that creates its soundtrack on the fly as it moves and bumps into objects.
- + “Loop Engine,” a hand-cranked audio-tape loop inspired by Charles Babbage’s **Difference Engine** that allows users to record and playback their voice and also modulate its pitch and speed.

“Robots and Culture” opens with a reception from 6 to 9 p.m. Friday, April 23 and continues from noon to 5 p.m. Saturday, April 24 at the former CTS building, 1201 Cumberland Ave., West Lafayette. Admission is free.

Photo caption: Passersby react as their human features are transformed into robot faces by “Robot Transformation,” a piece by Esteban Garcia in the “Robots and Culture” exhibit previewed outside ITaP’s Envision Center and given full display off-campus April 23 and 24. Garcia used an ITaP-configured PC and camera to overlay the robot face onto those passing through the hallway connecting the Purdue Memorial Union to Stewart Center. (Photo provided by Fabian Winkler)

Writer: Nick Rogers, (765) 496-8204, rogersn@purdue.edu

Source: Fabian Winkler, (765) 494-0160, fwinkler@purdue.edu