

- TribClassifieds**
- [Search Classifieds](#)
- [AutoLIVE.com](#)
- [Real Estate](#)
- [PaJobMatch.com](#)
- Shopping**
- [Search Local](#)
- Stores**
- [Search Newspaper](#)
- Ads**
- [Buy & Sell Tickets](#)
- [Grocery Coupons](#)
- PghLIVE.com**
- [Daily news e-mail](#)
- [E-mail newsletters](#)
- [Screensavers](#)
- [Free e-mail addresses](#)



PITTSBURGH TRIBUNE-REVIEW

[Back to headlines](#)

[Larger Text](#) [Smaller Text](#)

- [Blogs](#)
- [Business](#)
- [NIE](#)
- [Education](#)
- [Elections](#)
- [Health](#)
- [Local News](#)
- [Pittsburgh](#)
- [Westmoreland](#)
- [Fayette](#)
- [Regional](#)
- [North Suburbs](#)
- [East Suburbs](#)
- [South/West Suburbs](#)
- [News Summary](#)
- [Roadwork](#)
- [Police & Courts](#)
- [Most-Read Articles](#)
- [History](#)
- [Middle East Reports](#)
- [Obituaries](#)
- [Photo Gallery](#)
- [Search News](#)
- [Special Reports](#)
- [Web Reports](#)
- [Weather](#)

Science non-fiction

By [Allison M. Heinrichs](#)
TRIBUNE-REVIEW
Wednesday, July 13, 2005

With sparkling, blue eyes and rich, brown hair, Grace knows how to work a room. Using her feminine charms, she made her way through a crowd of hundreds Tuesday at the 20th National Conference on Artificial Intelligence at the Westin Convention Center, Downtown.

Grace stopped occasionally to pose for snapshots and asked if anyone had seen her friend in a hot-pink cowboy hat.

She made a social faux pas or two, almost crushing an \$1,800 robotic dog with her 300-pound frame. But all things considered, Grace had a pretty good time -- for a robot.

Photo Gallery

[click to enlarge](#)



[Elizabeth Boese talks Tuesday to Philip K. Dick](#)
Andrew Russell/Tribune-Review

Tools

- [Print this article](#)
- [E-mail this article](#)
- [Subscribe to this paper](#)
- [Larger / Smaller Text](#)

[Subscribe to your local newspaper](#)

-advertisement-

We've Moved...

Join us for our grand reopening!




Red Sauce Voted Best in City
Voted Best Italian Restaurant

Authentic Italian Cuisine
412.431.4511

Grace was one of 19 robots participating in the conference's 14th annual Mobile Robot Competition and Exhibition. Her job was to entertain the crowd and allow her Carnegie Mellon University team of creators to test how she uses social interactions, rather than sight and sound, to achieve a task -- in this case, finding a team member in a pink hat.

"She is supposed to be entertaining for the conference attendees and get people to play with her," said Mark Michalowski, 25, a CMU doctoral student who helped prepare Grace for the

conference.

Site Index

[Site Index](#)

Tools

- [Check your email](#)
- [Helpdesk](#)
- [Contact Us](#)
- [RSS Feed](#)
- [Site Tools](#)
- [Site Map](#)
- [Advanced Search](#)

Newspapers

- [Tribune-Review](#)
- [Pgh. Tribune-Review](#)
- [Valley News Dispatch](#)
- [Daily Courier](#)
- [Valley Independent](#)
- [Leader Times](#)
- [Blairsville Dispatch](#)
- [Gateway Newspapers](#)

Partners
SkiEngine.com
Pittsburgh Pennysaver
KQV Radio



"But on a more serious note, in any environment where there are people, we think we should design robots that can interact with them in a social way. That way, people will be more eager to help if it is trying to deliver something or find somebody," he said.

Across from Grace, an android version of the late science-fiction writer Philip K. Dick sat in a chair candidly chatting about his novels and personal habits. A true conversationalist, he made eye contact and punctuated his remarks with smiles and scowls on his realistic, three-dimensional face -- sculpted by David Hanson, founder of Texas-based Hanson Robotics Inc.

"In a lot of (Dick's) books, advanced robots look and act just like people," said Andrew Olney, the technical director of the FedEx Institute for Intelligent Systems at the University of Memphis who wrote the software to control the robot's responses.

Nearly 11,000 pages of Dick's novels are stored in the robot's memory, he said.

"It's not just a robot that looks like him. It's also supposed to respond like him," Olney explained.

Nearby, several robots rolled through a section of a hallway, seeking bright balls and stuffed animals as part of a scavenger hunt. The robots had to make their own decisions about how to locate and retrieve the objects using artificial intelligence: No remote controls could be involved, said Paul Rybski, a CMU post-doctoral fellow and co-chairman of the competition.

One robot from Canada even managed to register for the conference without assistance.

Spartacus, created at the University of Sherbrooke in Quebec, wheeled up to the registration desk, introduced himself; made arrangements to give a talk to the attendees; and volunteered to act as a guard or to take photographs.

Spartacus' only hang-up was with technology: The hotel's elevator doors kept closing too fast for him.

Allison M. Heinrichs can be reached at ahenrichs@tribweb.com or (412) 380-5607.

[Back to headlines](#)

Today's Most-Read Articles

1. [Pull over! You've been targeted by survey police](#)
2. [Lightning injures 30](#)
3. [Boy remains critical](#)
4. [Witness details murder rampage](#)
5. [Woman dies in crash](#)

Today's Most-Sent Articles

1. [Lightning injures 30](#)
2. [Note keepers](#)
3. [PNC cuts could mean job losses](#)
4. [Pull over! You've been targeted by survey police](#)
5. [Starkey: Butkus good deal for Montour, Cerro](#)

[Click here for advertising information](#) || [List all Advertisers](#)



[Subscribe to the Newspaper](#)



Images and text copyright © 2005 by The Tribune-Review Publishing Co.
Reproduction or reuse prohibited without written consent from [PittsburghLIVE](#).
[Feedback](#) | [Report a Bug](#) | [Advertise with us](#) | [List all advertisers](#)
[Contact Us](#) | [Make us your homepage](#) | [Terms of Service](#)