Automating a Robot Camel Jockey

Background
Pressure from human rights groups has led to a ban on the use of young children as camel jockeys in the Middle East. But government officials in Qatar tried something different. In early 2004, they hired a Swiss robotics corporation called K-Team to build mechanical jockeys. Trial races involving 10 robotic riders were held this July and they will be used in regular races when the camel racing season begins in October. Project leader Alexandre Colot says creating the robots was quite a challenge.

"It's completely a new development we have done for this project," Mr. Colot says. "There is very hot temperature, a lot of humidity, sand, and very high shocks and acceleration, because we are on top of a camel which is quite a very fast animal, running around 45 kilometers per hour. So we have completely developed something with a human

Performance Measure?

Environment?

Actuators?
1. reins (for turning, slowing down)
2. riding crop (for accelerating)
3. position (for optimizing the camel's stride, increasing aerodynamics, etc.)

Sensors? – what sensors should be included?

Spam Detection

Background
Proofpoint Spam Detection uses a multi-tiered attribute extraction process that inspects more than 100,000 attributes of incoming email messages—including sender IP addresses, message envelope headers and structure—as well as unstructured content in the body of messages.

All of the attributes detected within incoming emails are used by the MLX Anti-Spam Engine to ultimately assign a spam score which represents the probability that the message is spam. To stay ahead of evolving spam tactics, the engine is constantly and automatically kept up-to-date by the Proofpoint Dynamic Update Service.

Performance Measure?

Environment?

Actuators?

Sensors?