

# Emerging Paradigms in Personal Robot Design

Chance Jiang  
<[chance@hqsmartbot.com](mailto:chance@hqsmartbot.com)>

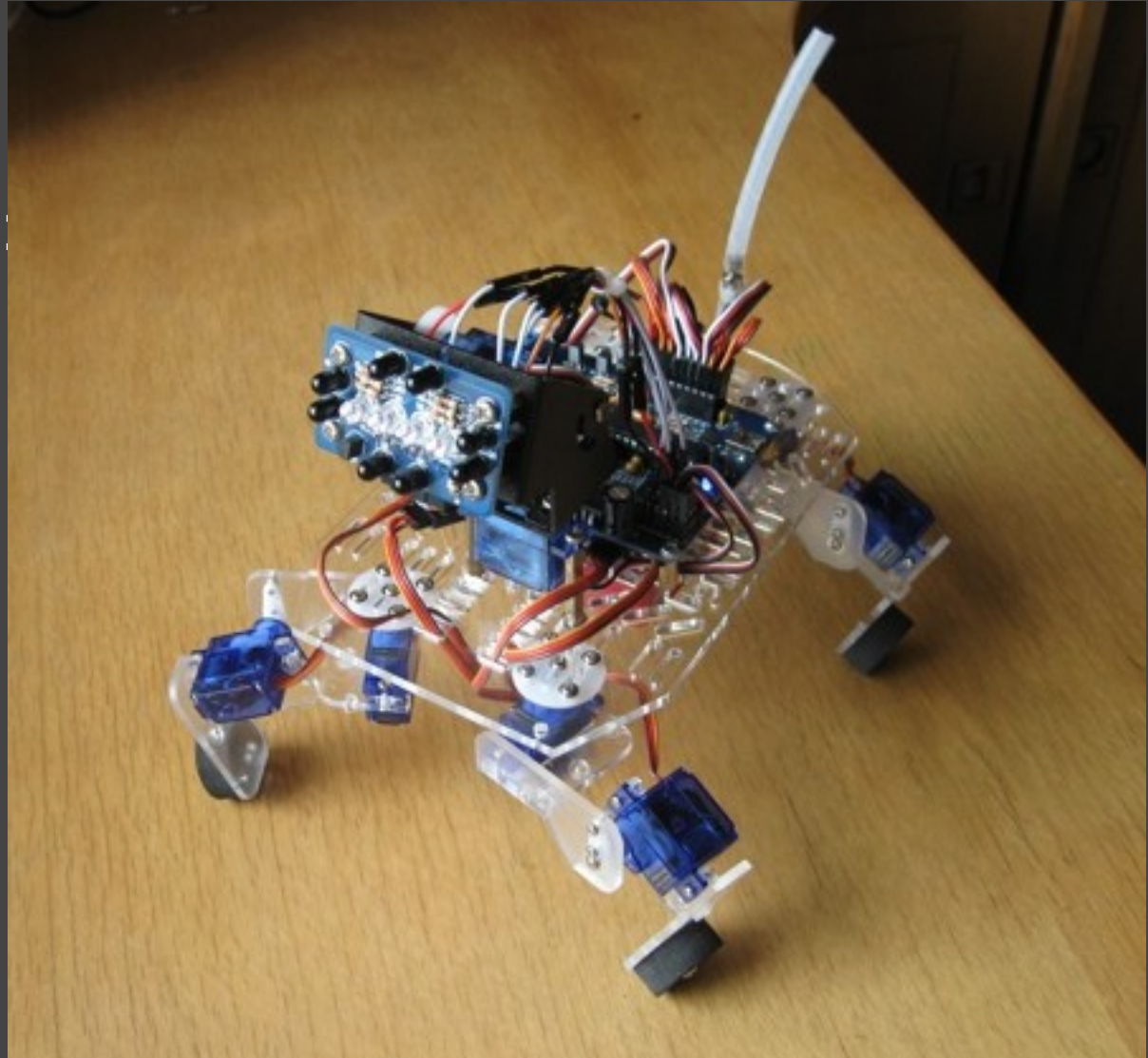
# About the speaker

- Deputy Chief, Intelligent Software & Robotics Society, Guangdong Academy of Computing
- Product consultant, [www.feyin.net](http://www.feyin.net)

# Personal Robots?

- Yes, it's coming, because China can make them more affordable
- Product demo

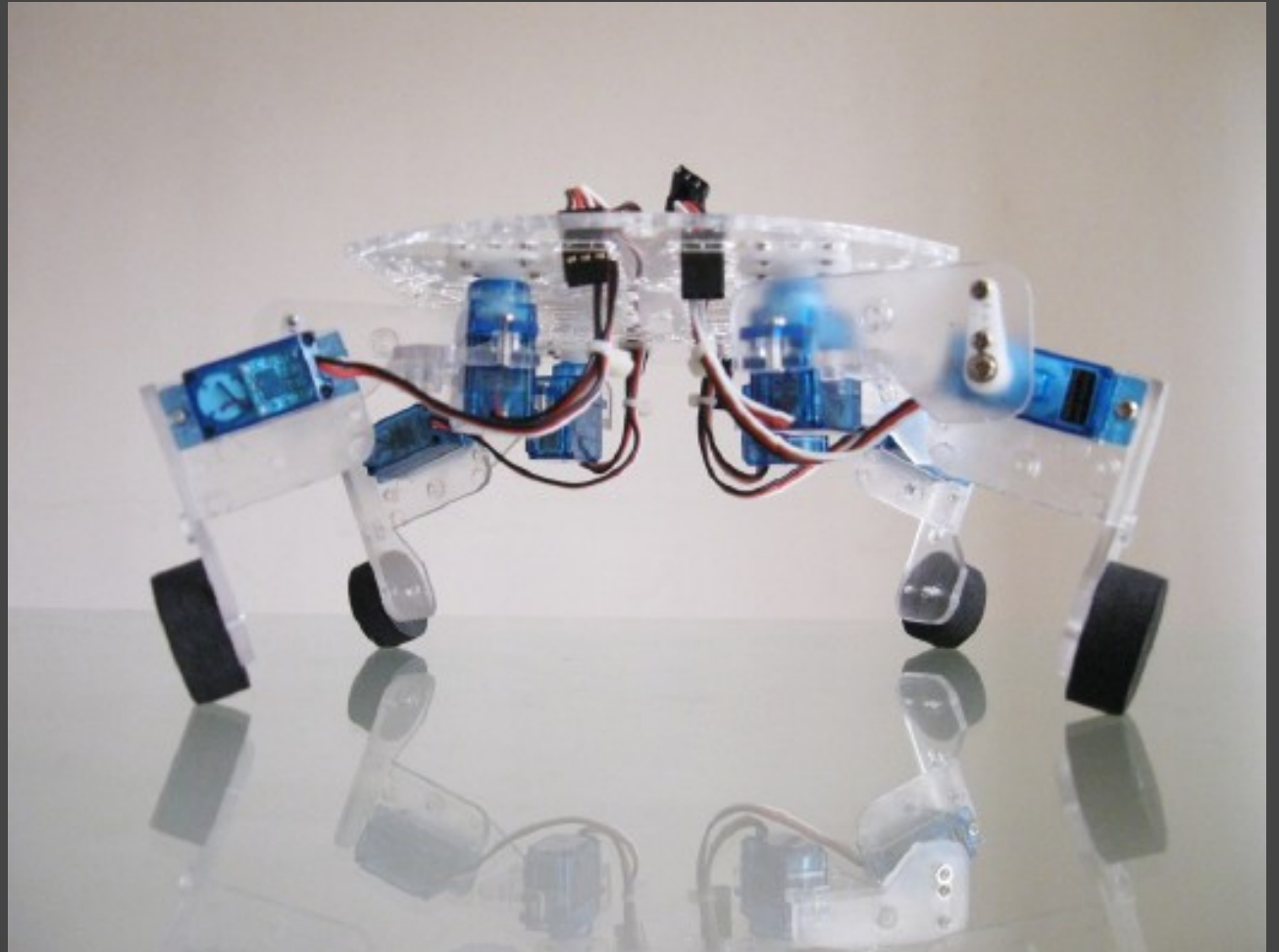
Your desktop puppy



# Personal Robots?

- Yes, it's coming, because China can make them more affordable
- Product demo

Your desktop spider:



# But, how do we interact with them?

Traditionally:

- hand gestures, signs and sound
- limited in the WAYS we 'communicate' with robots
- how many sensors you can build into them?
- cost?
- complex handling, too much trouble
- market size problems

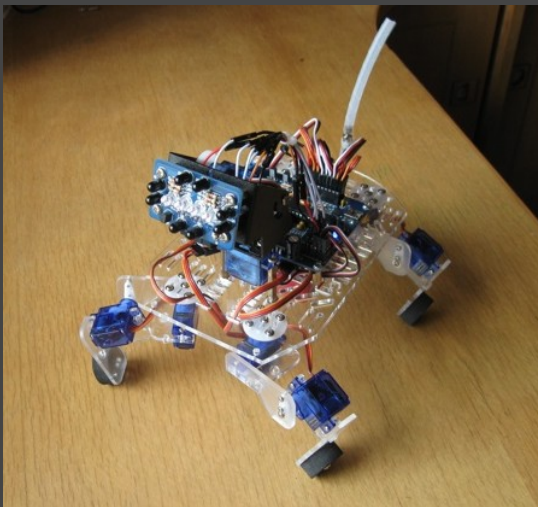
# An emerging paradigm...



+



+



Smart phone as robot brain/proxy:

- infinite possibilities to extend your personal robots' capability
- your robot can be "social"
  - with Twitter API
  - with Facebook API
  - with Weibo API
  - with SoundCloud API
  - .....
- a cheap robot toy can be as intelligent as your cloud

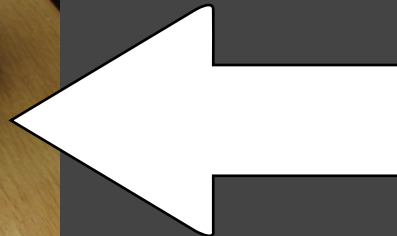
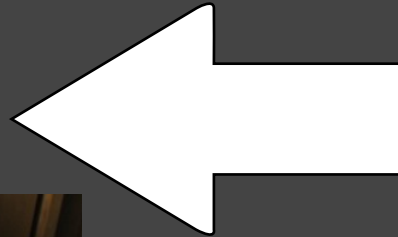
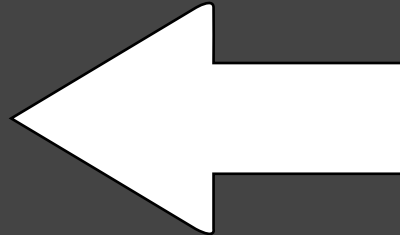
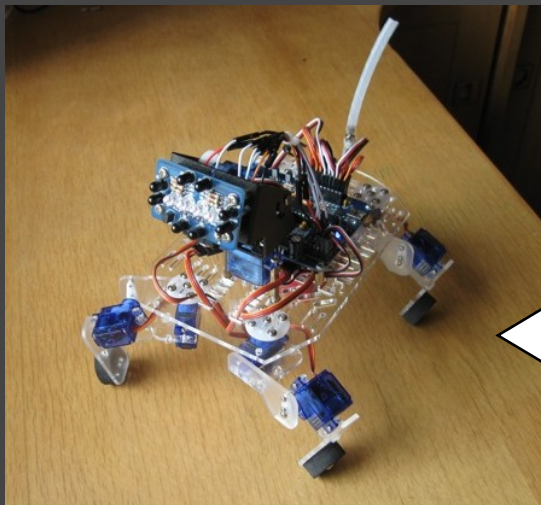
# Enabling technologies



+



+



- Apps/cloud service APIs
  - Ruby/Python
  - HTTP
  - Sockets...
  - ...
- Controller via mobile apps:
  - Bluetooth
  - Infra-red
  - ...
- China / GD as world no. 1 toy maker already taken care of this

# Ideas for personal bot

- Robot as personal assistant:
  - educational / entertaining
  - emotional, erotic (yeah...don't laugh, you lonely planet dwellers!)
  - functional (household helpers, ...etc)
  - security
  - ...
- Think about a sub-set of human intelligence you give to it
- As a venture investment opportunity
- Leveraging on China's exiting and mature electronics manufacturing industry
- .....



# What next?

## App/Service platform developers

- Envision your application and markets, as always
- Any idea to explore product-market fits for personal robots?
- Investors...

## Mobile apps developers

- Get ready for connecting both cloud and robots
  - device controller app / proxy app to cloud
  - mobile app talking bluetooth with robots

## Robot (hardware) makers

- Making your hardware generic and open
- Alliance with robotic app makers

Questions?