



# **CPS Research and Development in China**

**Wei Zhao**

**University of Macau**

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# R/D Effort in Mainland China

- 1. No good translation in Chinese**
- 2. Called “Internet of Things”**
- 3. Was truly hot in 2009/2010, large and consistent effort by both central and local governments**
- 4. Most R/D efforts focused on applications**

# R/D Effort in Mainland China

1. **Basic research projects:** funded by NSFC
2. **973 Projects:** Large-size, fundamental research; 3 x US\$2M
3. **863 Projects:** Large-size, translational R/D; 1 or 2 x US\$6M
4. **Demonstration Projects:** Super-large-size, 5 to 10 x US\$??M

# My 973 Project

1. CFP: 5 lines;
2. Success rate: 3 out of 15+, one round of panel and two rounds of “interviews”
3. US\$2M for 3 years; subject to annual on-site evaluations; renewable and extendable(?)
4. One “Chief Scientist” plus 5 sub-teams (Tsinghua, CAS, Tongji, UMacau, and E China Normal) of 25 people
5. Suppose to delivery results in both basic research and prototype of applications

# Challenges

- **Design, implementation, and promotion of protocols for secured and real-time communication**
- **Realization of model-driven embedded computing**
- **Innovative naming and search mechanisms**
- **Exploration of alternative, lower-layer communication mechanisms**
- **Legal concerns on data collection and distribution**