

The Future of Networked Computing

网络化计算的未来

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Who am I ... and what is this talk
about?

我是谁... 以及这次讨论是关于什么?

Do not expect answers ... this talk is about **questions**

and indirectly about **opportunities**

谈话目的并不是想给出答案... 而是提出 **问题**

以及间接发现 **机遇**

Let us start with what we already know about the future of networked computing:

‘ubiquitous’

‘appliance-based’

‘service-oriented’

关于网络化计算的未来，我们从已知的特点谈起：

无处不在的计算

独立小型设备的普及

面向服务

There is not much more that needs to be said about these trends!

这些趋势已经耳熟能详，也就无需多讲了



- But what challenges do they bring in their wake? My (biased) software view!
- 那么后续的挑战会是什么呢? 我对软件开发的理解 (带有个人偏见的) !

Multi-Core Architectures

多核计算设计（如利用双核芯片）

Green Computing

环保计算

Cheap (Nano) Sensors

廉价（纳米）传感器

Radical Hybrid Computing

超前混合型计算

Information Overload

信息过载

Dynamic Service Composition

动态的服务整合

QoS Monitoring and Guarantees

服务质量的监控与保障

Trust

信赖

Autonomy & Reflection

软件的自控性与自省性

Supply Chains and 'Ecologies'

供应链与生态群落

Evolution of Open Source Model

开放源代码模型的进化

Innovation and Intellectual Property

创新与知识产权

Global Software Development
[up the value chain]

全球化软件开发
【提升价值链】

Changing Users

口味多变的用户群

Digital Life

数码人生

Agility with Dependability

（软件开发的）高效行与可靠性

Personalised 'development'

真正的个性化开发

Non-functionals Rule!
[compositionality]

全局性法则
【可整合性】

Estimation and Predictability

估测与可预测性

Calculus of Project Risk

系统计算出项目开发的风险



Business Strategy: close
the gap between research
and practice

商业策略: 紧密联系理论
研究与实际运作