



Secure Cloud Computing: A Research Perspective

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Texas Fresh Air
Big Data and Data Analytics Conference

Cloud and Cyber Security Panel

March 30, 2016

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About ICS



- > Founded in 2007
 - Major commitment to secure cloud computing from the beginning
- > Pursue PhD level world-leading research with real-world impact
 - ❖ 13 PhD graduates, 2010-2015
 - 13 PhD students currently in process
- Two major laboratories
 - FlexCloud
 - FlexFarm
- Any high tech company (which is basically all companies) need 10% PhDs on their staff

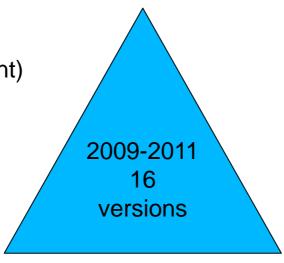


NIST Cloud Computing 3-4-5 Definition



5 Essential Characteristics

On-demand self service
Broad network access
Resource pooling (multi-tenant)
Rapid elasticity
Measured service



3 Service Models

Software as a Service (SaaS)
Platform as a Service (PaaS)
Infrastructure as a Service (laaS)

4 Deployment Models

Public Private Community Hybrid



Secure Cloud Computing Research



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