Breakout Session I

Computing Architecture for Edge Computing (CAEC)

Lead: Yiran Chen (Duke University)
Yingyan Lin (Rice University)

1. What are the **critical requirements** of computing architectures **for future edge** computing applications?
   In particular, are there any **new requirements that have not been fully accommodated** in the current computing architecture design?

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2. What kinds of **new computing units will be needed** in future CAEC and are there any necessary architectural changes?

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3. Can the current **memory and storage systems satisfy the new requirements?** If not, what are the **new technologies that are worth exploring?**

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4. Any **new computing models and algorithms**

that need to support?

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5. **How the workload to be partitioned** between different layers in the context of edge computing?

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6. Any **new benchmarking methods and metrics** required?

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7. Any **critical concerns on security and safety**?

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Computing Architecture for Edge Computing (CAEC) Report

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Yingyan Lin (Rice University)

1. What is **edge computing**? (lots of debate!)
2. **Identify typical applications** of edge computing to better understand its various aspects
   - benchmark metrics and methods
   - critical requirements, proper system partition, etc
3. Need to **work together with government**
   - Government policy: what can be done?
   - Policy→ Application → System/Metrics
4. Necessity of **community education**, such as the breakout sessions and workshops