

SOSCON

삼성 오픈소스 컨퍼런스
SAMSUNG OPEN SOURCE CONFERENCE

OPEN YOUR UNIVERSE WITH SOSCON

Livecoding “down to the metal”

MOSO

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Programming the World

- Programming real-time systems
- Programming real-time in real-time
- Connected to built environment (firm real-time)
- Audio Signal Processing

Programming IN the World

- Programming as a Journey
- Steering an algorithm through time
- Programming as situated – time and place
- Cyber-physical coupling – sense perceptions

Extempore (<http://extempore.moso.com.au>)

- Strongly Timed (temporal semantics)
- Distributed & Heterogeneous
- Concurrent (layered)
- Wide (full-stack)
- High Performance & Deterministic

Extempore is a Lisp

- s-expression syntax
- First class lexical closures
- Tail recursion
- Lisp Macros
- Scheme like block structure

Except when it's not

- Statically typed, type inferencing
- Expressive data representation
- Reified generics
- Specialized code-gen (no boxing)
- Fast
- DETERMINISTIC (unmanaged mem)

Programming an FM synthesizer

Cyber-physical programming

- Real-time, real-time
- Integrate programmer into closed loop
- Human, machine and environment
- `Above' but also `within' the loop
- Cognitive extension

Down to the metal

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Computer graphics



Computer graphics



Down to the metal

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THANK YOU!

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