Code Orchestration

or: “recipes for good spaghetti”
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Survey

Experience level and difficulty score

- Concurrent programming
- Sequential programming

Scores + Experience level (color heat)

Difficulty score
New paradigms?

Computational models as illustrated by L.A. Stein, 1999
node = ZOC("MyNode")
node.register_int("MyInt", 0, "re")
node.start()
node.run()

class MyFirstActor(Actor):
    def setup(self):
        self.register_int("MyInt", 0, "re")

    def update(self):
        self.emit_signal("MyInt", self.get_value("MyInt")+1)
Dining Philosphers
Test 3
Results

Difficulty scores

- Blue: Sequential
- Orange: Concurrent
- Green: Framework

Difficulty score

1 2 3 4 5
Conclusion

- http://github.com/sphaero/sphof
- http://sphof.readthedocs.org
- Research: http://z25.org/007
What's next

- Code Orchestration: ZOCP → SPHOF → ???
- Port to C
- Research Synchronisation primitives!
Thanks:

- Aldo Hoeben: Node Editor
- Z25.org foundation: http://z25/org
- HKU MAPLAB: http://maplab.nl
- ZeroMQ: http://www.zeromq.org
Questions

- SPOF: http://sphof.readthedocs.org
- ZOCP: https://github.com/z25/pyZOCPP
  https://github.com/z25/pyZNodeEditor
- ZYRE/ZRE: https://github.com/zeromq/zyre
  https://github.com/zeromq/pyre
- ZeroMQ: http://www.zeromq.org