
Evolvable Hardware and the Embryonics Approach

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CS 851 – Bio-Inspired Computing

Overview

- POE Model
 - The three axes of evolvable hardware

- Embryonics
 - Overview and hierarchy
 - Implementation approaches
 - Example applications

- Evaluation and Conclusion

POE Model

- Bio-inspired hardware can be partitioned along three axes
 - Phylogeny: temporal evolution (GAs)
 - Ontogeny: cellular division
 - Epigenesis: learning (ANNs)

