# Artificial Intelligence, Blockchain, e Criptovalute nello Sviluppo Software

Lezione 4.A: Cognitive Models in Software Development – Artificial Intelligence in Software Development

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#### Structure of the lecture

- AI?
- AI in SW Development
- Our analysis of AI in SW Development
- Cognitive Models
- Data Science, Machine Learning, and beyond



- Modeling the human mind
- Emulating the human mind
  - Vision
  - Natural language processing
  - Reasoning
  - o ...
- Computational intelligence
  - Data science
  - Fuzzy models
  - Machine learning
  - Granular computing
  - o ...
- Automated reasoning and formal models



#### AI? – Our focus

- Modeling the human mind
- Emulating the human mind
  - Vision
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  - o ...
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### Modeling the human mind

- Physiological analysis
  - Analysis of physiological signals
  - Contextual analysis of situations
    - Pair programming
    - Standup meetings
- Psychological analysis
  - Systemic thinking
  - Distributed cognition/extended mind
  - Dual model
- Analysis by analogy with other disciplines
  - Storytelling
  - Painting
  - Dancing



## Questions?

End of lecture four – part A.