

COMP 9322

# Software Service Design and Engineering

Lecture 4 – Part2 Cognitive Services

# Disclaimer

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- Parts of the slides taken from Cognitive Services Engineering presentation by Sci Prof Boualem Benatallah and Shayan Zamani

# What is Cognitive Computing?

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- “Cognitive computing represents self-learning systems that utilize machine learning models to mimic the way brain works”
- Evolution of Computing
  - 19<sup>th</sup> Century Tabular Computers (Charles Babbage)
  - 1950 Programmable Computers (ENIAC)
  - Now: Cognitive Computing

# The Features of Cognitive Computing

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□ Adaptive

□ Interactive

□ Iterative and stateful

□ Contextual

# Scope of Cognitive Computing

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- Engagement
- Decision
- Discovery

# Limitation of Cognitive Computing

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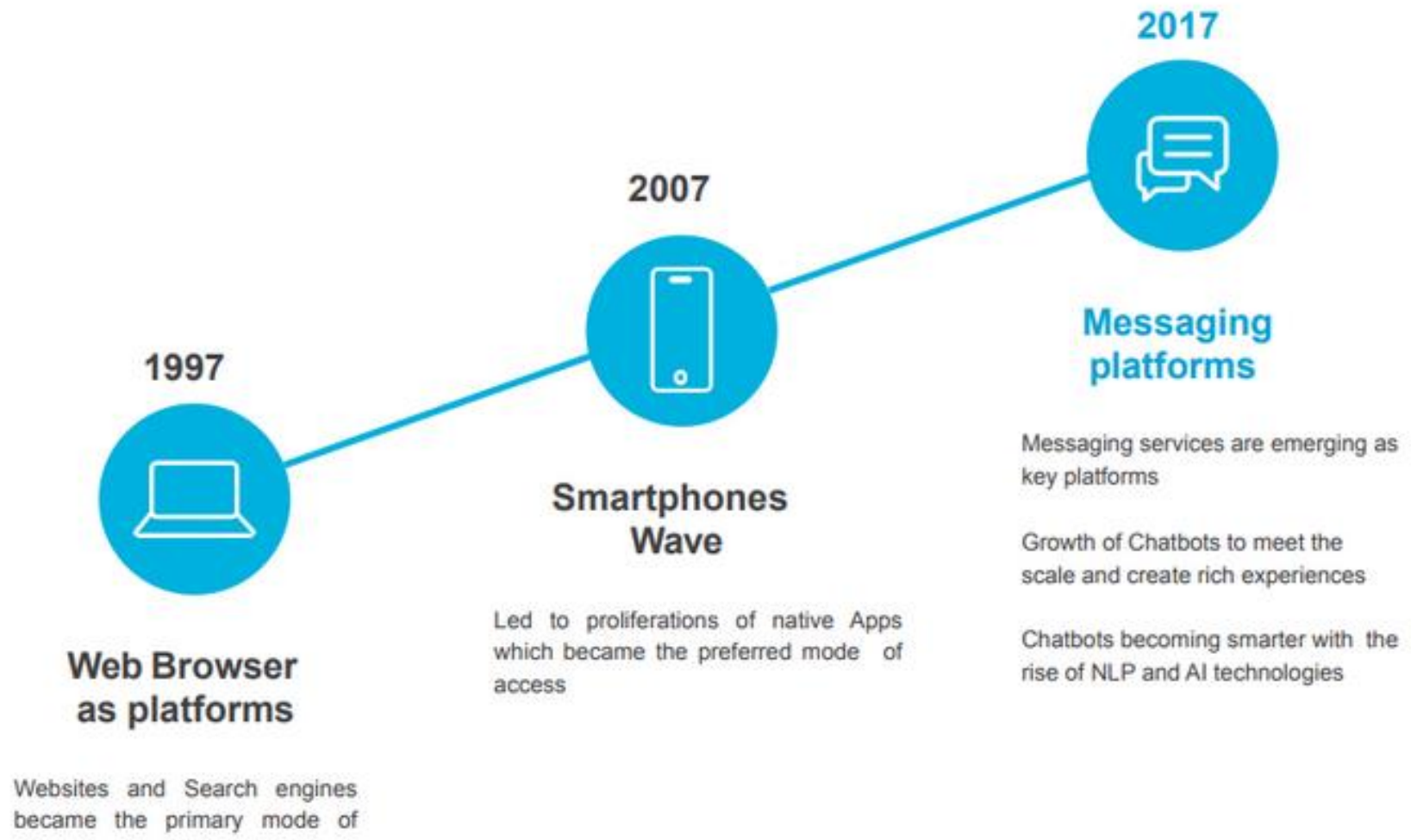
- Cumbersome training
- Low consideration of Risk

# Cognitive Computing Vs AI

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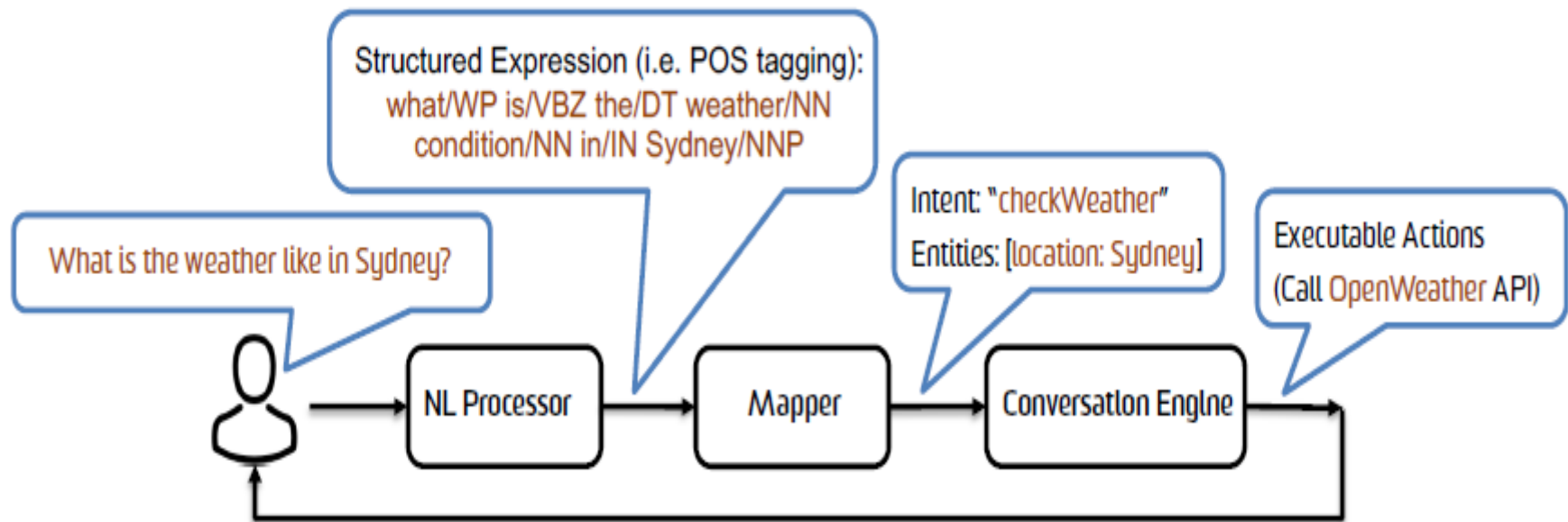
- Think like a human Vs give best intelligent Answer
- thinking, reasoning and remembering

# Conversational Bots (ChatBots)





# Conversational Bots (ChatBots)



# ChatBots Design Guidelines

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- ❑ **1. Don't pretend to be a human**
- ❑ **2. Keep it incredibly simple**
- ❑ **3. Respect the chat medium**
- ❑ **4. Optimise for the end user**
- ❑ **5. Provide an escape hatch**
- ❑ **6. Use structured input when possible**

Questions?