

Open source blooming AI

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Introduction

- **Artificial Intelligence** aims at enabling computers to operate as humans would, thus creating smarter and differentiated IT solutions that are able to sense, comprehend, and act.
- **Open source** is a proven way of collaborating to create technology. The freedom to see the code, to learn from it, to ask questions and offer improvements.
- Accenture has seen the potential of promoting Open Source Software (OSS) in Artificial Intelligence. The latter is in constant need of information to evolve, and the former is a source of information. **This combination is what has propelled AI into what we know today.**



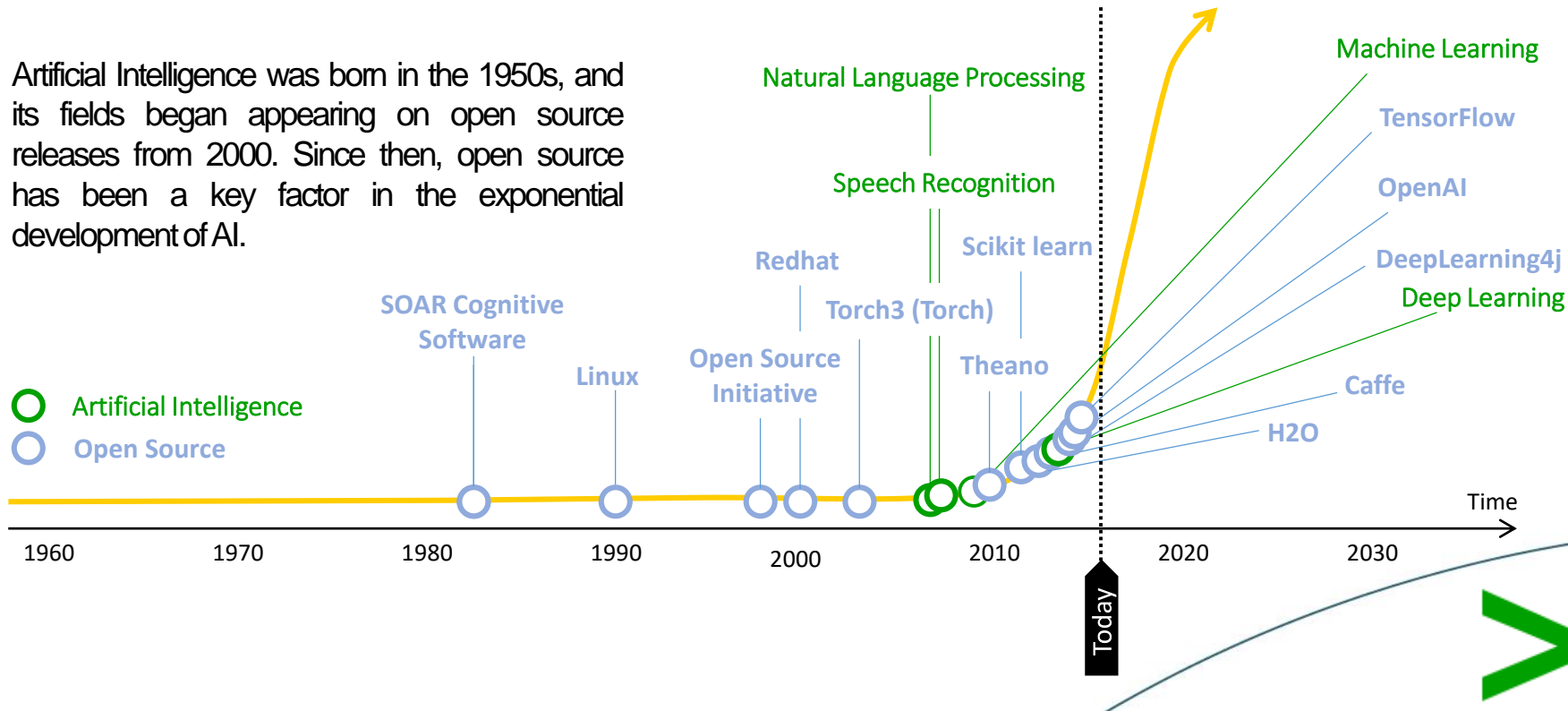
“Every solution starts with sharing a problem. Technology thrives in the open, where people are free to share their ideas and build on the work of others. Creation is always an act of collaboration.”

– Redhat, World Leader in Open Source –



OSS-AI Evolution in History

Artificial Intelligence was born in the 1950s, and its fields began appearing on open source releases from 2000. Since then, open source has been a key factor in the exponential development of AI.



OSS-AI Market Assessment

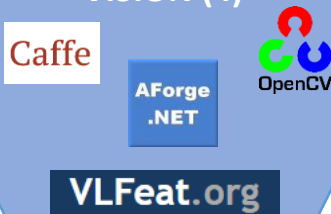
MACHINE LEARNING (+14)



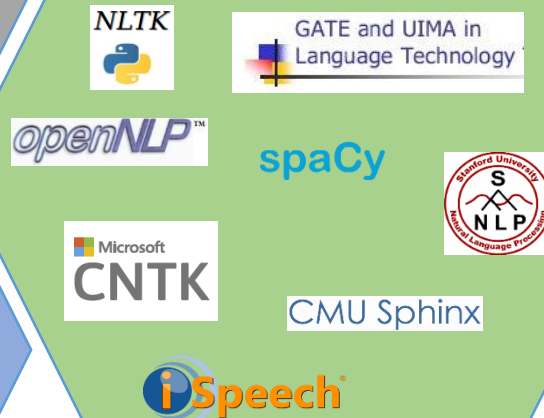
VIRTUAL ASSISTANTS (4)



COMPUTER VISION (4)



NATURAL LANGUAGE PROCESSING (8)



OSS-AI Benefits



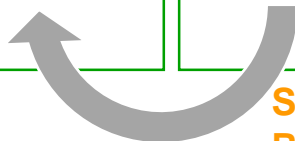
Benefits for Enterprises

- Marketing
- More software security
- Faster innovation
- Flexible software
- Integrability
- Customization for the client
- Lower costs

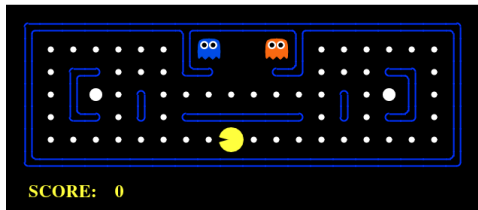
Benefits for the Academic World

- Growth of AI community
- Growth of AI research
- Growth of AI resources.
- Students get an OS mind.
- Improvement of student skills
- Open source programs

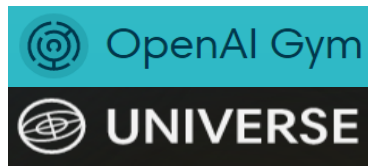
Skill resources
Research



OSS-AI Examples of Success Research



In the academic field, University of Berkeley has an open source project called the **Pac-Man Project**.



In the research field, OpenAI has released **OpenAI Gym** and **Universe**, both open source platforms for the developing and monitoring of agents.



Soar group is composed by Soar Technology, Cogniteam and academic institutions including University of Michigan and University of Portsmouth. They have developed the **Soar general cognitive architecture**, which supports all the capabilities that are required of an intelligent agent.

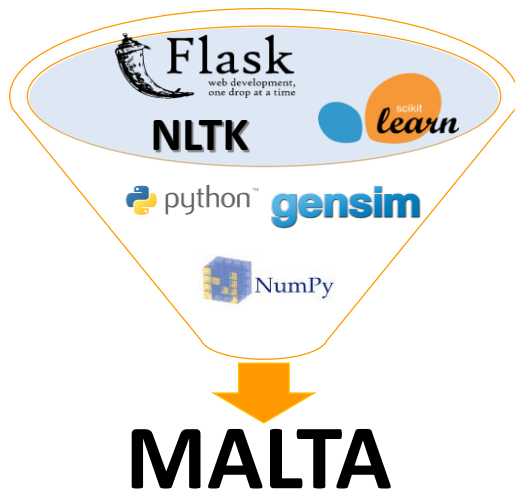


OSS-AI Examples of Success

Accenture - MALTA

Accenture Machine Learning Text Analyzer (MALTA) currently supports **text classification**. It can be applied to documents, emails, service desk tickets, chat transcripts, and other text-based input. Common use cases can be SPAN Filtering or Document Classification.

MALTA is built entirely with **open source technologies**:



OSS-AI Examples of Success

Accenture - ARP

Accenture is developing the next generation of robotics - RPA 2.0. RPA 2.0, which we call the Accenture Robotics Platform (ARP), is built like a product powered only by **open source libraries** and Accenture's intellectual property (IP) - no commercial vendor involved. This internal product can be used by Accenture people to deliver RPA managed services to our clients, and aims at replacing or complementing the commercial RPA software.

Web

Application

Database

System 3270

SAP

Utility

Tools



RPA Agent



ROBOTS THAT **LEARN FROM OBSERVATION**

“over the shoulder” observation of knowledge workers to verify compliance or document current processes

ROBOTS THAT **IMPROVE OVER TIME**

Use **machine learning** to group and classify processes and grow their capabilities over time



OSS-AI Examples of **Success** LASTMILE

LASTMILE is an AI company making products for developers to build better conversational software. Our products power the next generation of intelligent bots and assistants on platforms such as Facebook Messenger, Live Chat, and Amazon Echo, enabling more human-like dialogue.



OSS-AI Conclusions



The combination of **Open Source** and **Artificial Intelligence** has been vital for the development of AI leading to its state nowadays. Because of this, technology reference companies, such as **Google** and **Facebook**, are **opening their** own software **code**.



Open source is becoming the **preeminent way to develop software** as it provides many benefits and raises the competitiveness of the company. In the academic world **open source enhances the skills of the students**, who are future workers and researchers, and further expands the research contributions in AI.



Cases like OpenAI give insight into the **success and potential open source Artificial Intelligence** has. In the future, as more people support open source, we are sure to see pivotal developments in the field.

Enterprises should encourage the development of AI and become a key point in the process by adopting and developing open source technologies.



Contact Information



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attention

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