Al & Coding Productivity

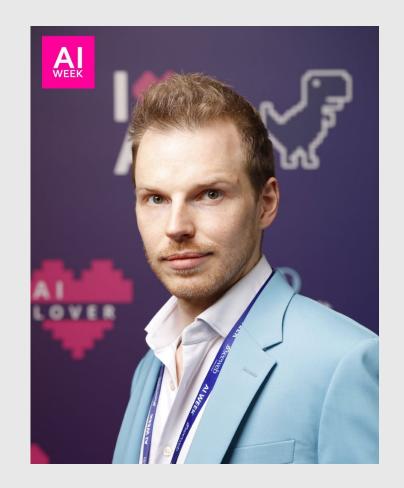


About me

Ing. Lorenzo Pinosa

Computer Engineer specializing in artificial intelligence since 2015

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Former experiences

BSc, MSc @ Politecnico di Milano



Everis (NTT Data)

- Al-focused projects
- Full-stack development
 - Including Cloud Architectures
- Held an AI lesson @ LIUC university







Former experiences

ARGO Vision

- Training of tailor-made AI models
 - Optimized for edge deployment
- SDK Development (Swift, Kotlin, ...)
- Held Al lessons
 - Pavia university
 - cGMP Master







About me

Al Engineer & Entrepreneur

- End-to-end company processes automation projects
- CTO/Fractional CTO for startups
- WIP products I hope to announce/launch soon



Meta-productivity



My vision

- Al is wonderful to automate
 - But what?
- A fine-tuned, high value-added process should be the base
 - Both for enterprise and personal usage



- Always lead the conversation
 - LLMs are eager to give answer
 - They do not plan (yet! o1-like models are coming)
 - Avoid local optima, plan first
 - "...do not write code yet, just outline all the possibilities to accomplish this."
 - "...wait for my confirmation before writing code."



- Be critic
 - Hallucinations are always possible
 - Also, sub-optimal answers
 - Ask (many) follow-up questions



- Compare!
 - Submit the question to different models
 - Analyze pros and cons of each answer, take the best
 - Understand each model strengths and weaknesses
 - You will be faster, if you know the best model for your needs



- Understand AI generalization ability
 - Machine Learning: learn to do things without being explicitly programmed
 - First skill: abstract concepts
 - Bigger models: higher abstraction capabilities
 - Smaller models: smaller capabilities, even if we still didn't hit the limit (but today is evident)
 - Read Apple paper "GSM-Symbolic: Understanding the Limitations of Mathematical Reasoning in Large Language Models"
 - https://arxiv.org/pdf/2410.05229



AI Tools



OpenWebUI

Own your LLM UI

- Add all models you like with LiteLLM
- Add local models with Ollama
- Highly customizable with functions, tools, pipelines



Continue.dev

The best extension for VSCode and IntelliJ

- Get help for new codebases or new languages
- Ask questions on codebase
- Get help at writing code
- Edit code
- SOON: Agentic AI with Anthropic MCP



OpenHands

- Best open-source tool on SWE-Bench
 - https://www.swebench.com/



Bonus

How to generate:

- Diagrams (mermaid)
- Graphics (SVGs)



Thanks for your time!

If you liked these projects,

contact me!

more are coming, I may need YOU!



Questions?

