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Programming with a martial art principles

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**There is no
knowledge that is
not power!**



Hello, I'm **Paolo!**



Node.js

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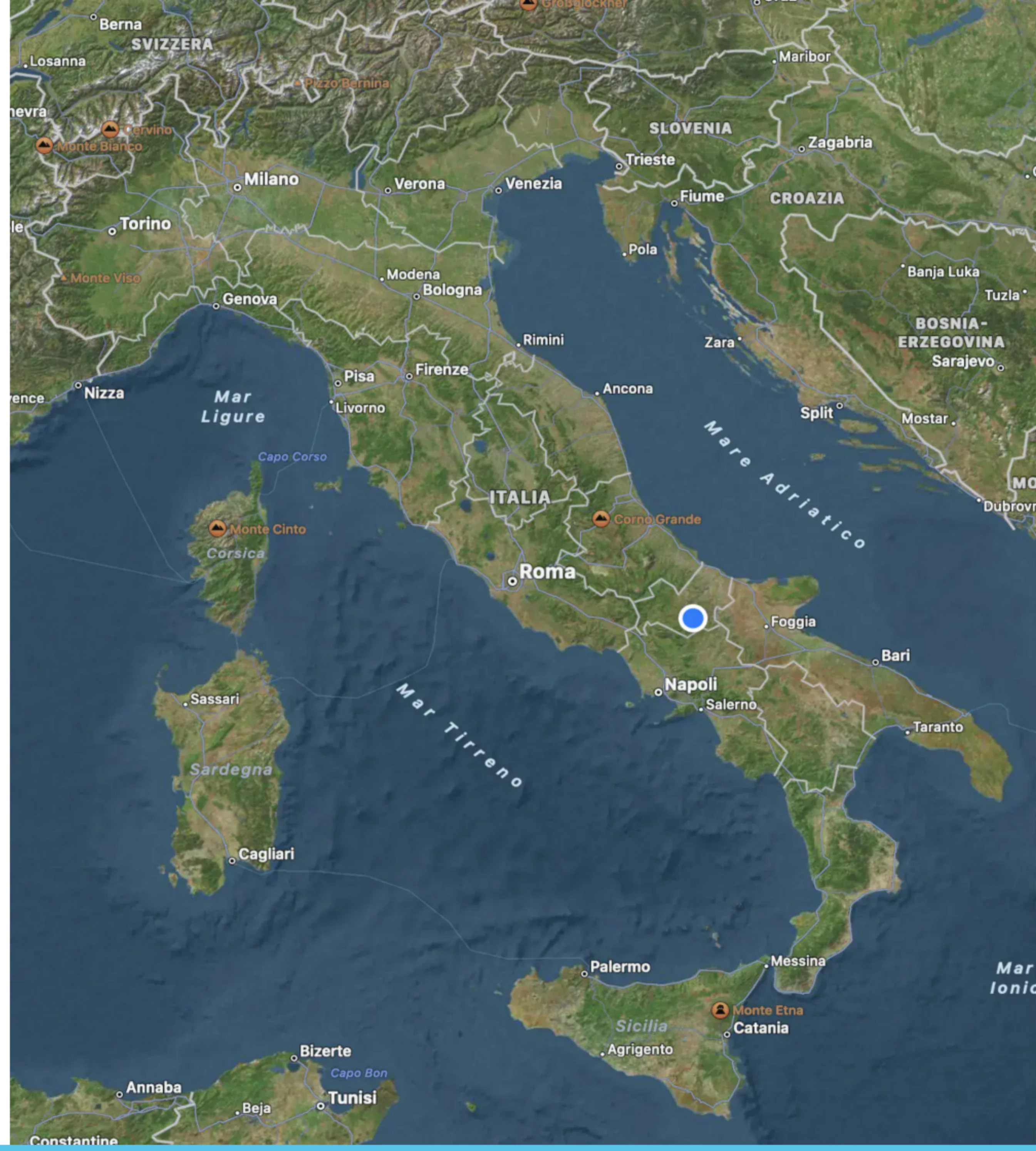
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What is programming?



What is programming?

“The process of writing and testing programs for computers”

The Oxford Dictionary

**What is a
martial art?**



What is programming?

“A traditional form of fighting or defending yourself, practised as a sport or as exercise.”

The Cambridge Dictionary

**But they are
completely
unrelated!**



It's all about us ...



Everybody is a multitude of traits

For instance, we are programmers, spouses or parents.



The different traits are not disjoint

They all influence the other ones.



The process is not voluntary

No matter how much you try, all the traits define you.

... and our brain, in particular



Everything you learn is useful

New brain connections are literally created every second.



You don't fully control your brain ...

Do not think about an elephant. **You have lost!**



... and that is a good thing

How many times your subconscious solved the problem?

Declarative, re-nted
states with
Rust enables to dec

Take me, for instance

I have several passions (1/2)



(Chubby) Cats

Those furry balls have seriously messed with my mind.



(Played) Soccer

Pretty obvious for a '84 Italian male. **Boring!**



Manga & Animes

It's easy to be an otaku now. Try in 2000's Southern Italy.

I have several passions (2/2)



Videogames

Since I was 6, as many developers.

Boring, again!



RPG & LARP

I started them late and they also seriously messed with my mind.



Programming

As most of us, isn't it?

How boring am I?

One last
thing™ passion



Martial art



**The wait
is over ...**





Wing Tsun*

*Romanization is controversial

What is that?



It has various possible translation

The most commonly used is "Eternal Spring". [Who catches the citation?](#)



It is part of kung fu

In particular, it is part of the Southern China martial arts.



Pretty atypical

You won't see any spectacular roundhouse kicks or similar.

Where did it come from?



It was made for women

The tradition says it was created for Yim Wing Tsun to defend herself.



It derives from Shaolin

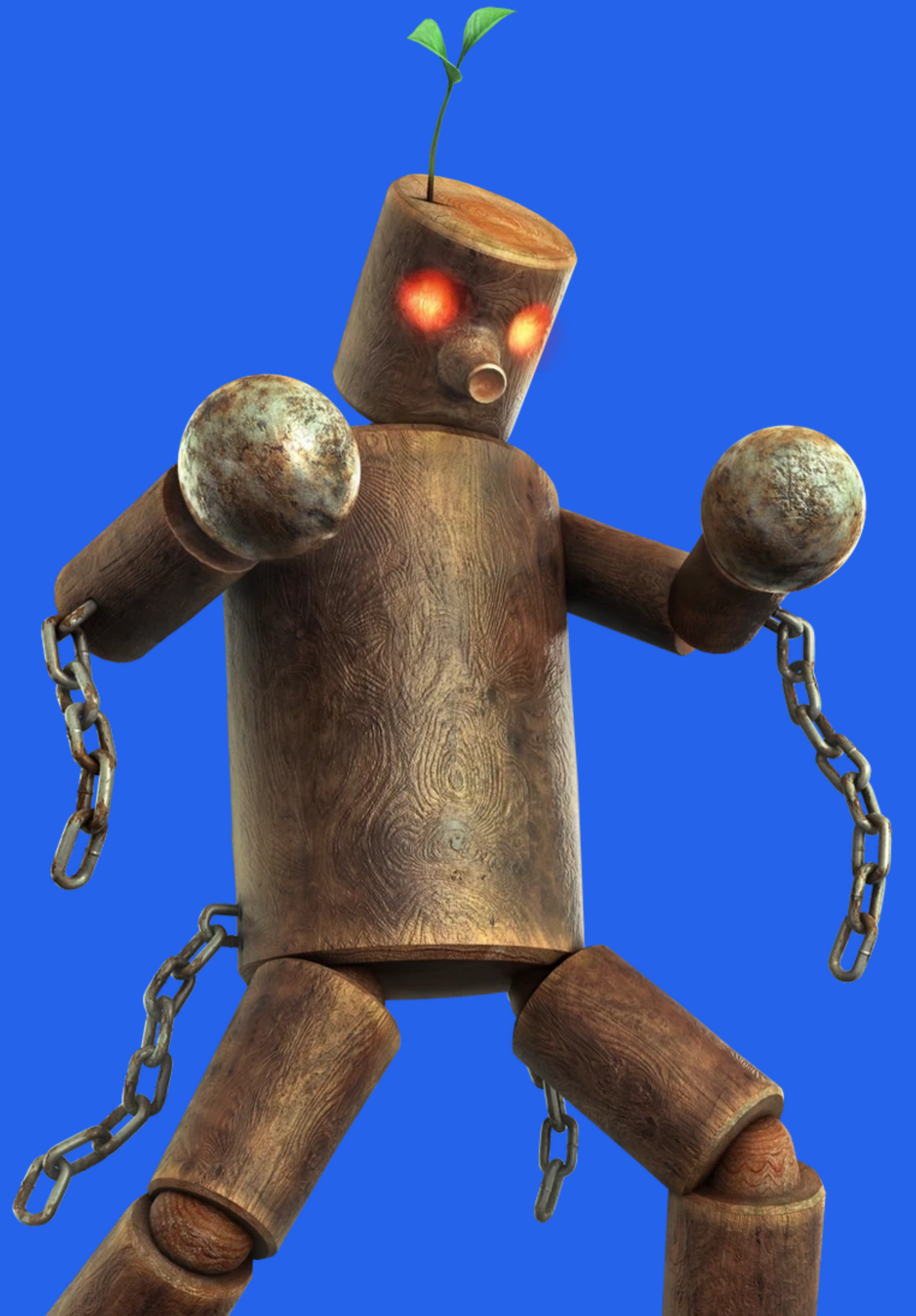
The tradition states the women monk Ng Mui as her original creator.



It also includes weapons

Butterfly knives and 3m staff are trained regularly.

**Meet our training
dummy**



**Sorry, I totally
could not resist!**





Meet our **real**
training dummy

Why did I chose Wing Tsun?



It focuses on effectiveness

Every millisecond matters. [Ring a bell?](#)



It is for everyone

You don't need to be able to do splits to throw a kick.



It redefines the concept of strength

You don't really need muscles.

**What about
programming?**



Let's clarify few things



Fighting is everywhere

Is not only on the ring or on the street. It's a general principle.



Martial arts are not just about fighting

Sometimes, they become a life philosophy.



Remember about the personas?

I unconsciously use what I learned in Wing Tsun everywhere.

**Let's apply the
Wing Tsun
principles to
programming!**

... finally! 😄



A young boy with short black hair and red-rimmed glasses is looking directly at the camera with a neutral expression. He is wearing a dark blue martial arts gi with a red and gold patterned sash. The background is a blurred martial arts dojo with wooden pillars and scrolls.

No **sifu has proof
checked this talk!**

Opinions are mine and I'm still learning. Be gentle! 🙏

Energy Principles

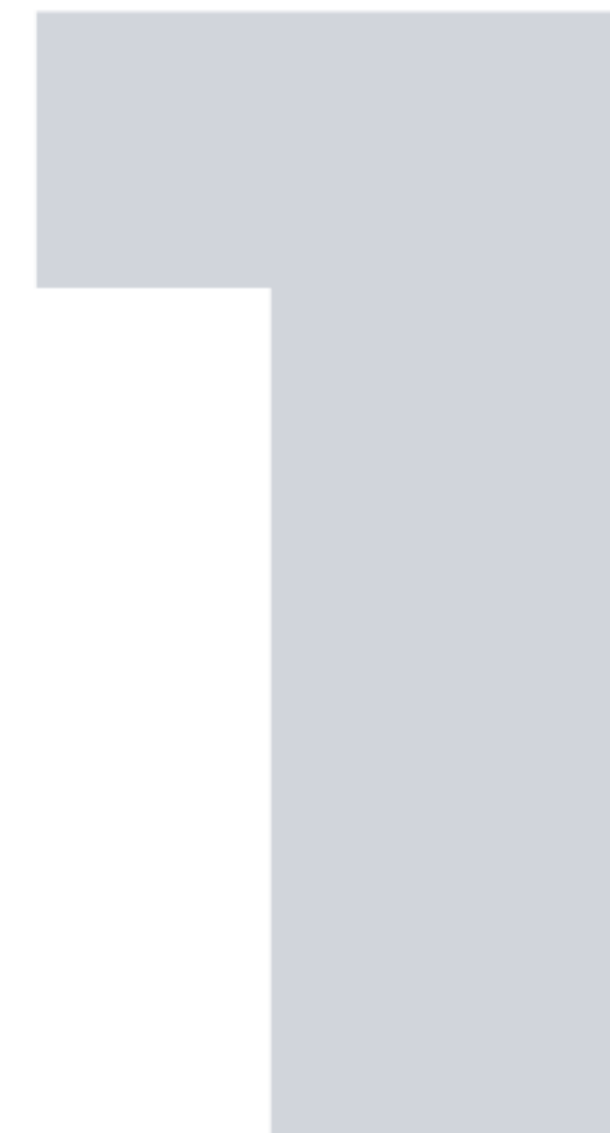


Energy Principles (1/4)



“Give up your own Force.”

1st Energy Principle



Give up your own Force



“K.I.S.S. and don't be stubborn.”

1st Energy Principle applied to programming



Energy Principles (2/4)



“Give up your opponent's Force.”

2nd Energy Principle



Give up your opponent's Force

***“Contain or redirect any point
of failure where it cannot harm.”***

2nd Energy Principle applied to programming

2

Energy Principles (3/4)



“Use your attacker's Force against him/her.”

3rd Energy Principle



Use your attacker's Force against him/her

“Thoroughly study the APIs and existing systems you have to work with.”

3rd Energy Principle applied to programming

3

Energy Principles (4/4)



“Add your own Force.”

4th Energy Principle



Add your own Force



“Apply lateral thinking when solving others' complex problems.”

2nd Energy Principle applied to programming



Chi Sao principles



**But what is exactly
Chi Sao?**



Chi Sao



It means "sticky hands"

It's a drill system which focuses on **NEVER** losing contact with opponent's arms.



It stimulates reflexes

As soon as you feel the way is free, **you hit**.



It stimulates self-perception

You must be careful in how much and where you use your force.

**Back to Chi Sao
principles!**

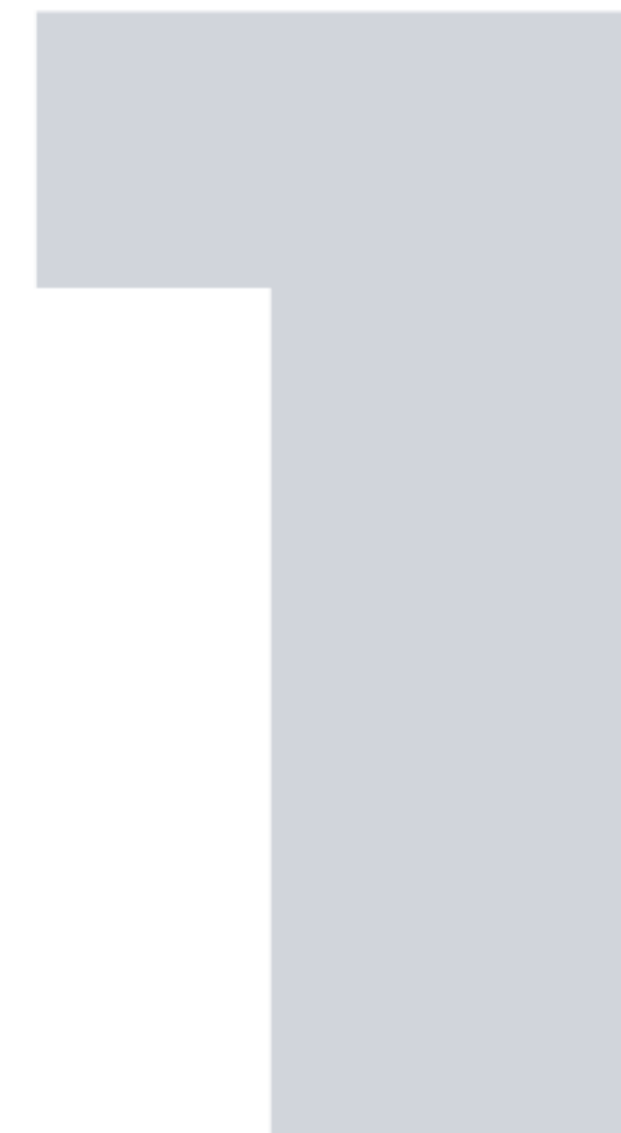


Chi Sao Principles (1/4)



“If the way is free, go forward.”

1st Chi Sao Principle



If the way is free, go forward



***“Never think short-term
and deliver continuously.”***

1st Chi Sao Principle applied to programming



Chi Sao Principles (2/4)



“If the way is not free, stick to the opponent.”

2nd Chi Sao Principle



If the way is not free, stick to the opponent

***“When there is an obstacle, put it aside
for a little but continue to monitor.”***

2nd Chi Sao Principle applied to programming



Chi Sao Principles (3/4)



“If the opponent is stronger, yield.”

3rd Chi Sao Principle



If the opponent is stronger, yield

“You can't always have it your way.

Be ready to yield in a controlled manner.”

3rd Chi Sao Principle applied to programming

3

Chi Sao Principles (4/4)



“If the opponent goes back, follow him/her.”

4th Chi Sao Principle



If the opponent goes back, follow him/her

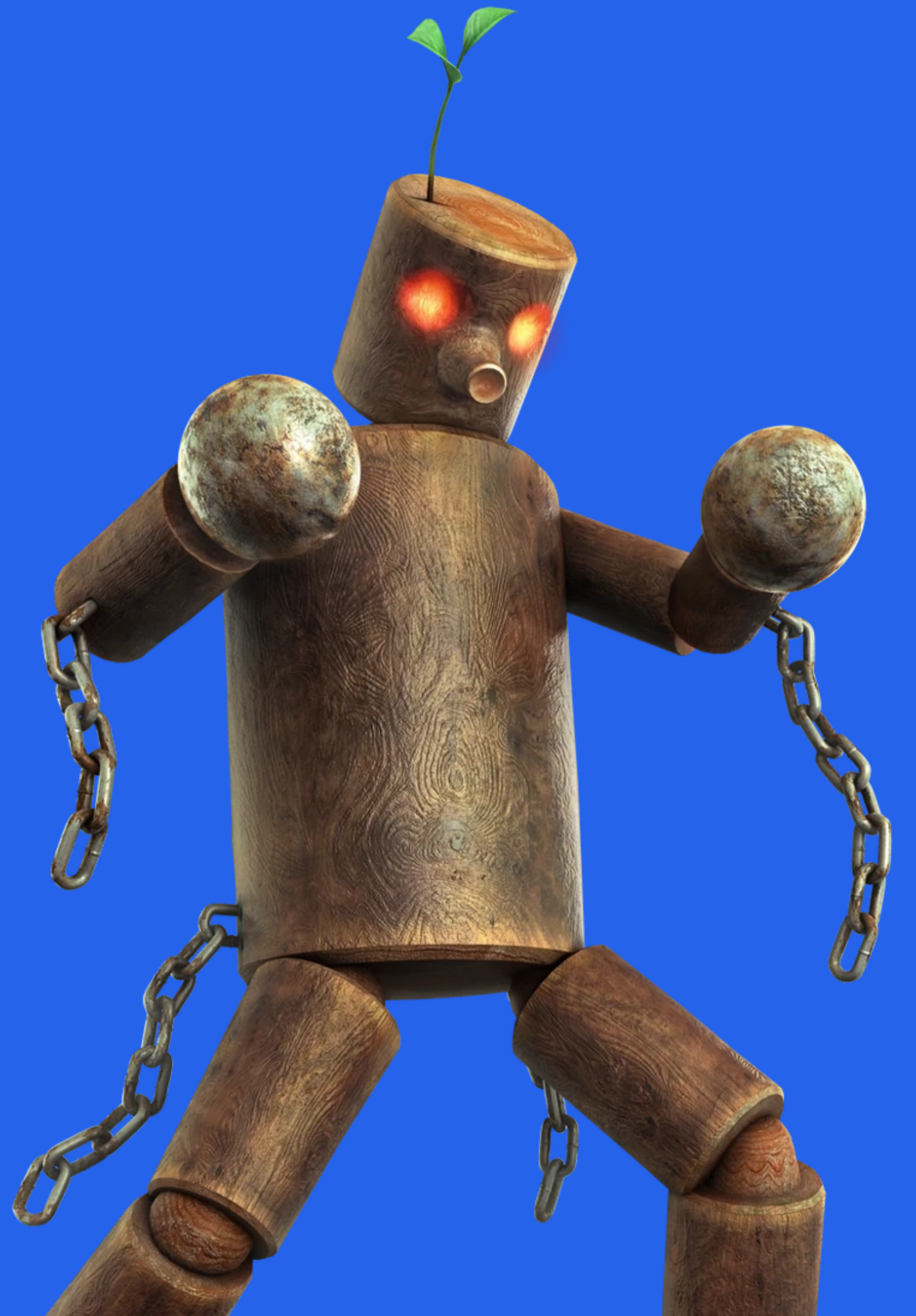
“When debugging, always follow a problem up to its resolution.

Don't believe in luck or coincidences.”

4th Chi Sao Principle applied to programming



Bonus principle!



A close-up photograph of a brown and white cow lying in a lush green field. The cow's head is the central focus, showing its brown and white patches, a yellow ear tag, and a blue mark on its horn. The background is a soft-focus green field under a bright sky.

**A good Chum Kiu shall be performed
within the space occupied by a laying cow.**

The Chum Kiu principle

**Sorry, could not
resist (again)!**



Take home lessons

What can we learn from this long journey?



Everything matters

All the knowledge we have helps us in our daily tasks.



You can't control everything

Including your own brain.

Remember the elephant?



Programming is like fighting

Fighting strategies can improve our approach to programming.

One last thing™

*“Mastering others is strength.
Mastering yourself is true power.”*

Lao Tzu





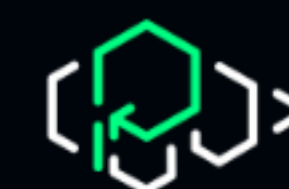
Thank you!

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