

# Hacking Thai Beats, Cities and Dances

Phoomparin Mano :: [poom.dev](http://poom.dev) :: DevCon 7 SEA

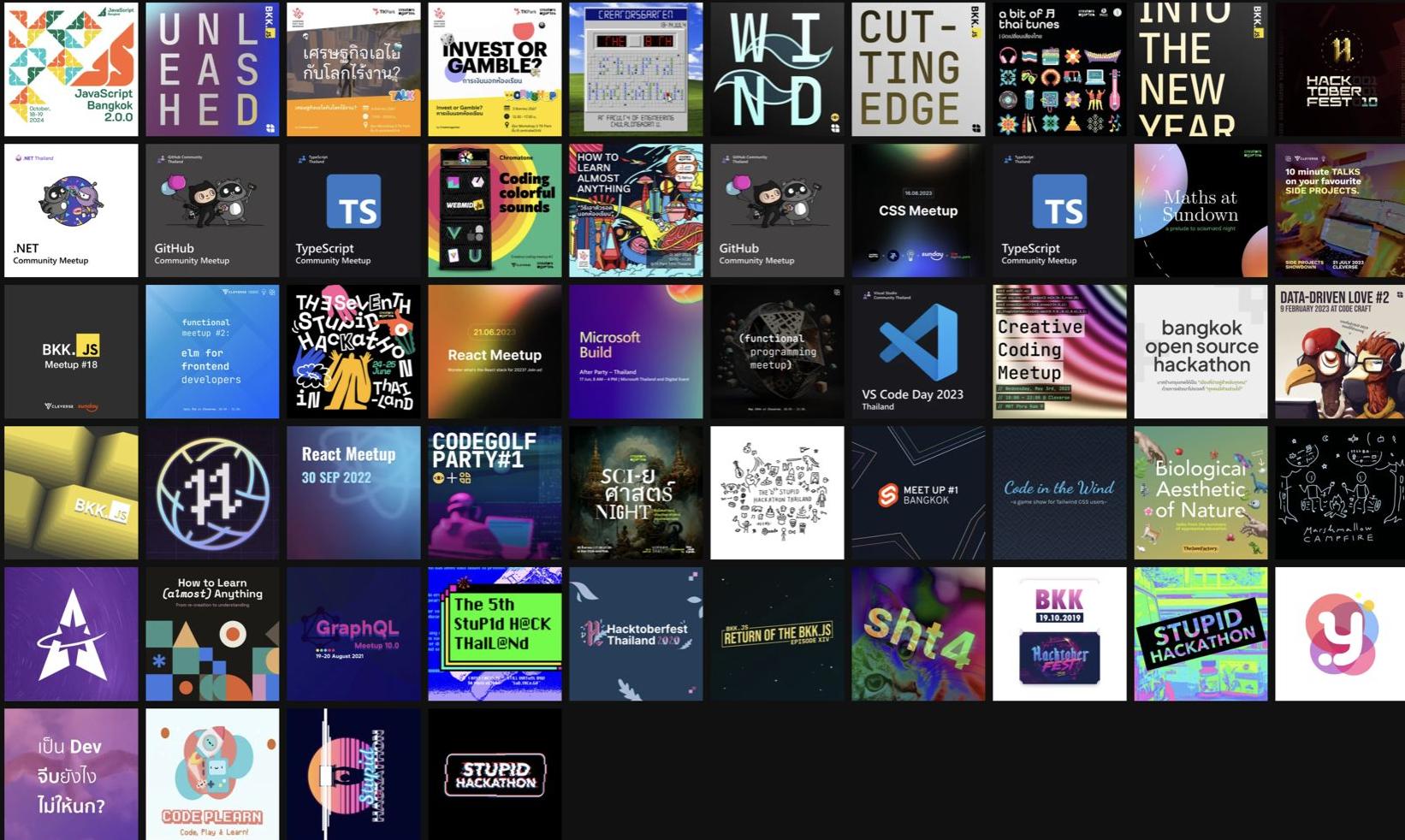


[creatorsgarten.org](http://creatorsgarten.org) :: creative builders collective

## i. how can we **inspire builders** to be creative?



## ii. how to bring **builders** to your **spaces**?



# Hacking Thai Beats





# អត្ថបន់ ខ្មែរ

The song “Enter Demon & Gods” reflects my verve for ways AI can empower Southeast Asian instruments, both real and AI generated, to become a part of modern musical culture, whilst respecting fundamental aspects of tradition like native tunings and melodic inflections.



Traditional Thai  
Beats & Instruments

+



Algorithmic Audio  
& Video Synthesis

```
xfade 3
  *Er resonance -0.02 0
  *Er lpf res05
  every 2 frames,
    *stack
      6 *00115.427* * speed 15000 10 1 pan 0.7 0.2*
      8 *superoperator 10,00,00 0000* * eraser* *duration -10.00 0.00* *slow 2 1700 1000 2000 2500
      9 *glitchFuzz* * speed 0 1 pan 0.0 0.04*
      7 *generator 0 0.05,0.0001*
      5 *turbulence 0,0.2* * * 10.00 0 2.0 100 0.01 * gain 10.0*
    *
  stack 1
    6 *0104.99,327* * 22 pan 0.9 0.2*
    8 *superoperator 5000 0000* * eraser* *duration 0.00 0.00*
    9 *generator 0 0.05,0.0001*
    5 *turbulence 0,0.2* * * 10.00 0 2.0 100 0.01 * gain 10.0*
  *
  *resonator
```



A Bit of Thai Tunes  
[creatorsgarten.org/event/algorave](http://creatorsgarten.org/event/algorave)

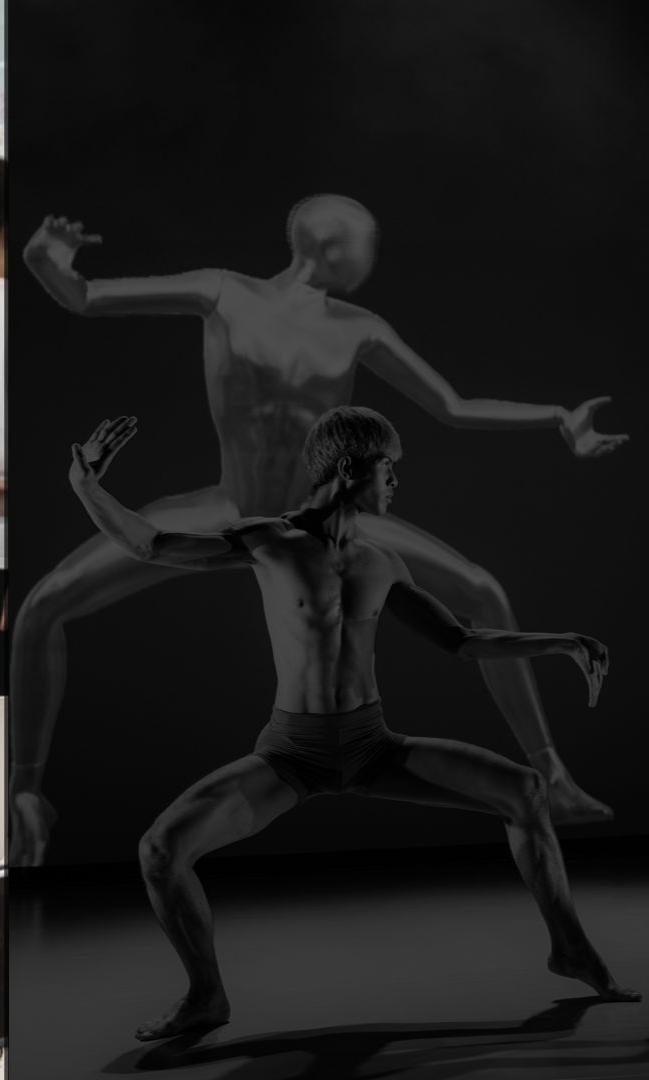
# themes and tools





Children learn best when they are actively engaged in **constructing something that has personal meaning to them**, be it a poem, a robot, a sandcastle, or a computer program.

# Hacking Thai Cities



bangkok is great, but...

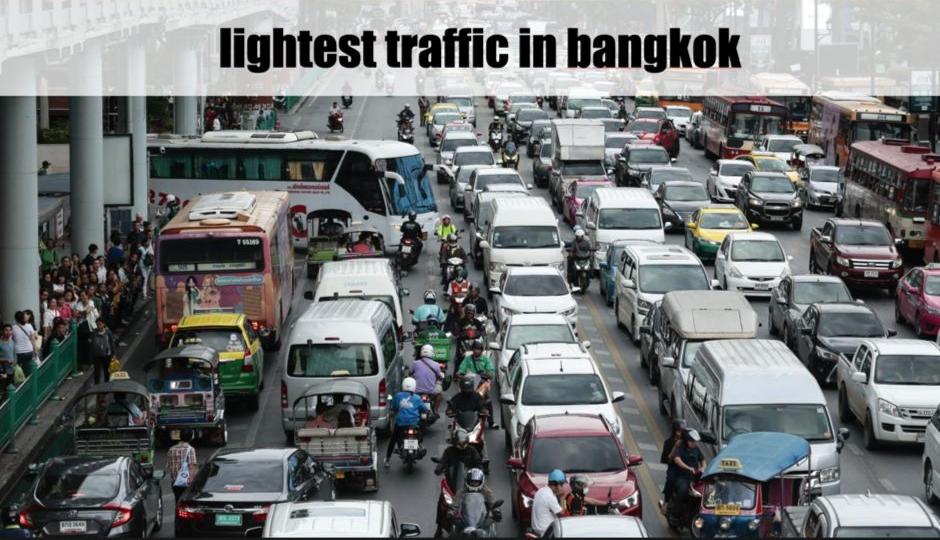
**freshest air in bangkok**



**driest street in bangkok**



**lightest traffic in bangkok**



**cleanest street post in bangkok**



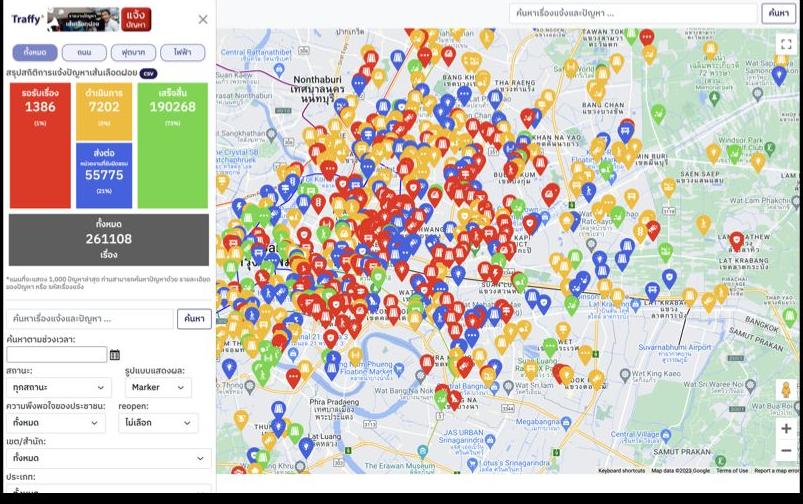
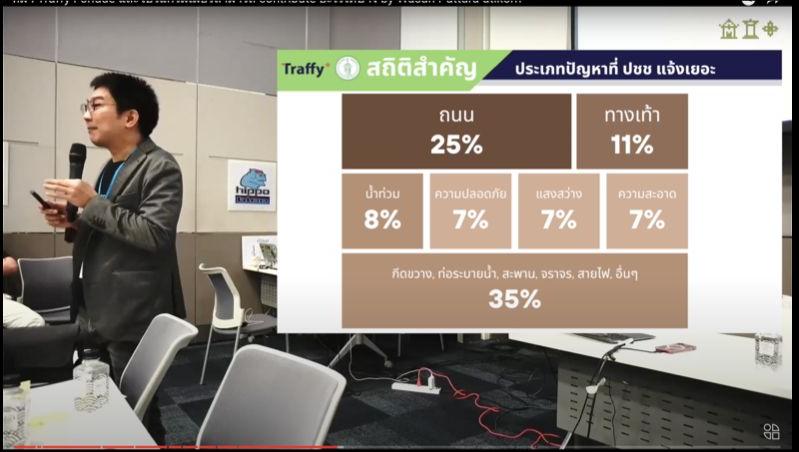


ideas often go nowhere.

why not make an  
open source software?

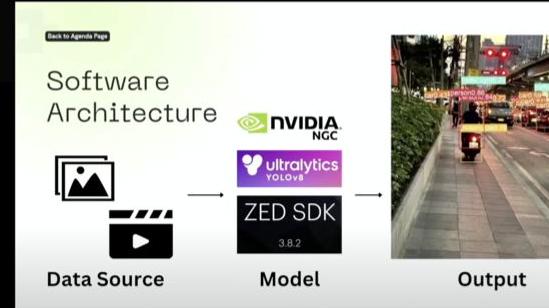


Bangkok Open Source Hackathon :: [creatorsgarten.org/event/bangkok](https://creatorsgarten.org/event/bangkok)



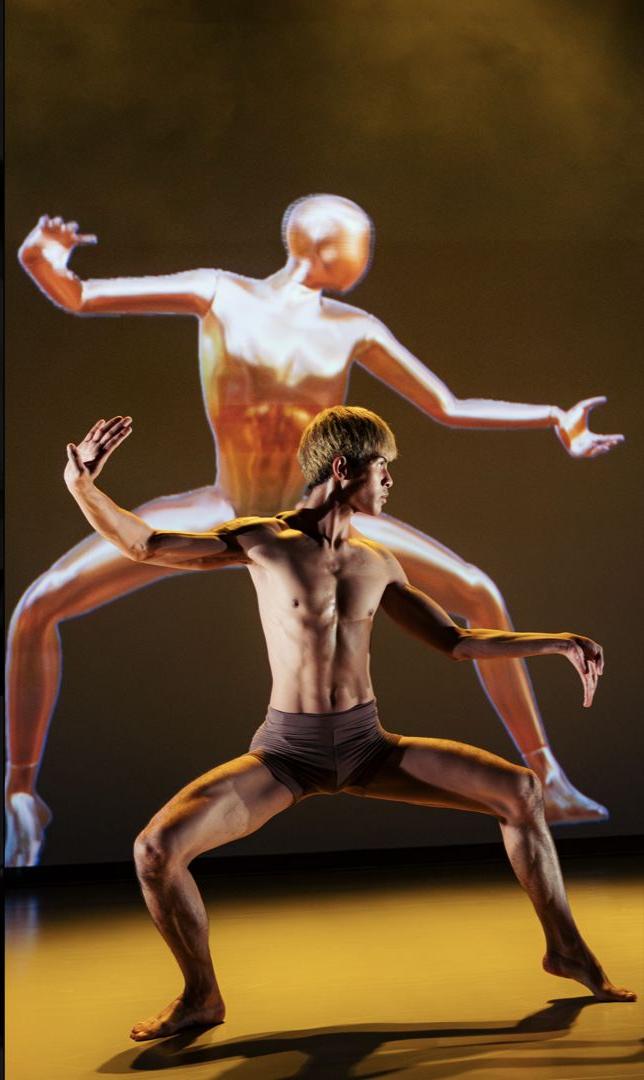
open source: low floor + high ceiling + wide walls





experimental technologies naturally emerges from impactful domains

# Hacking Thai Dances



1923

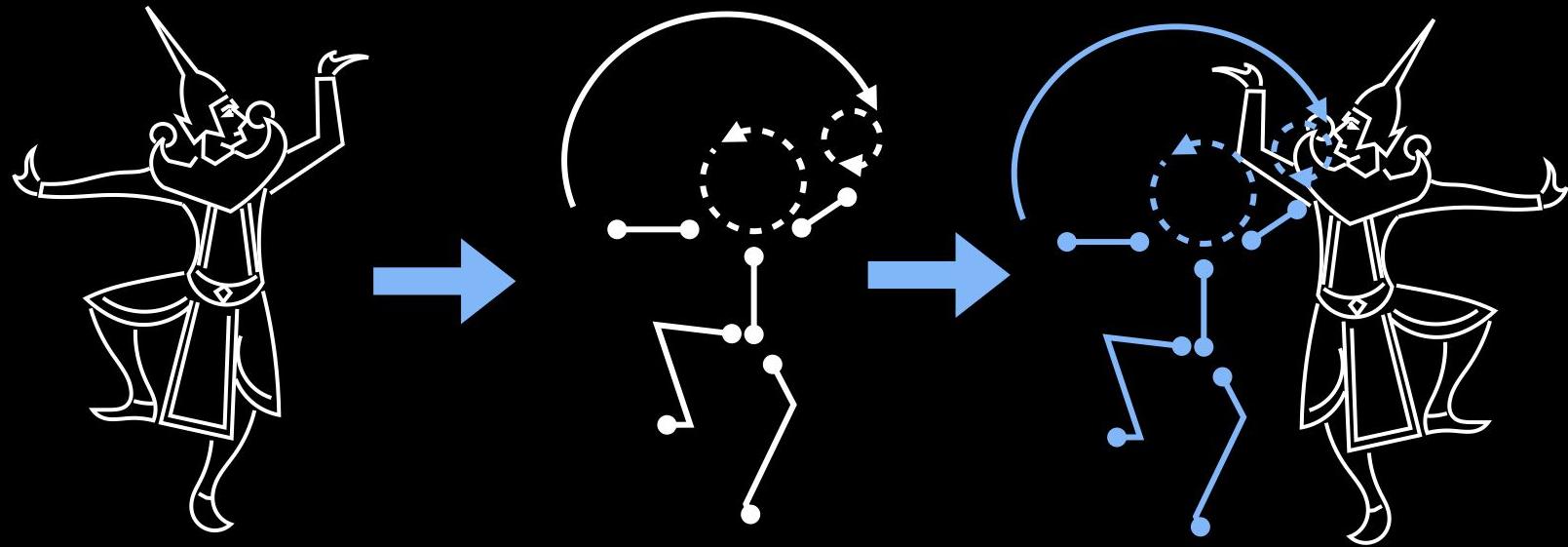


2023



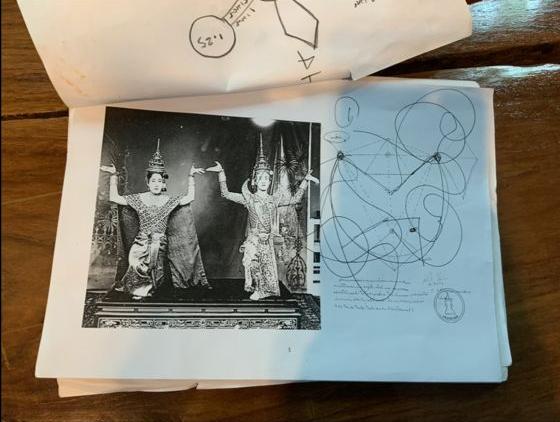
still 1923



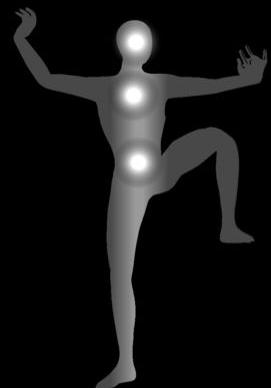




Cyber Subin :: [media.mit.edu/projects/cyber-subin](http://media.mit.edu/projects/cyber-subin)



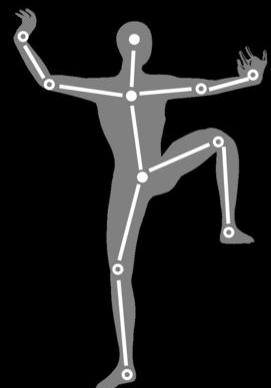
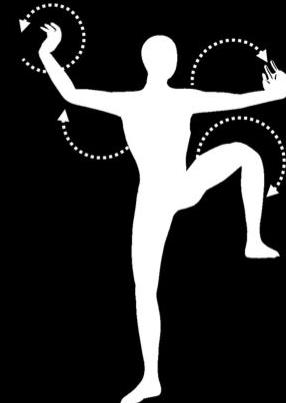
Energy



Circles & Curves



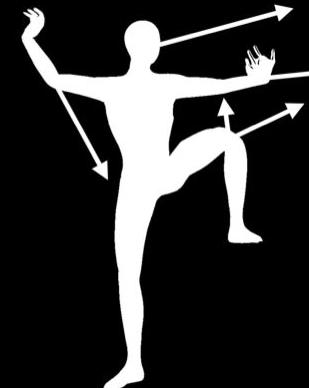
Synchronous Limbs



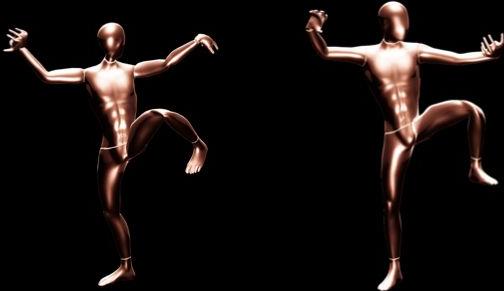
Axis Points



External Body Spaces

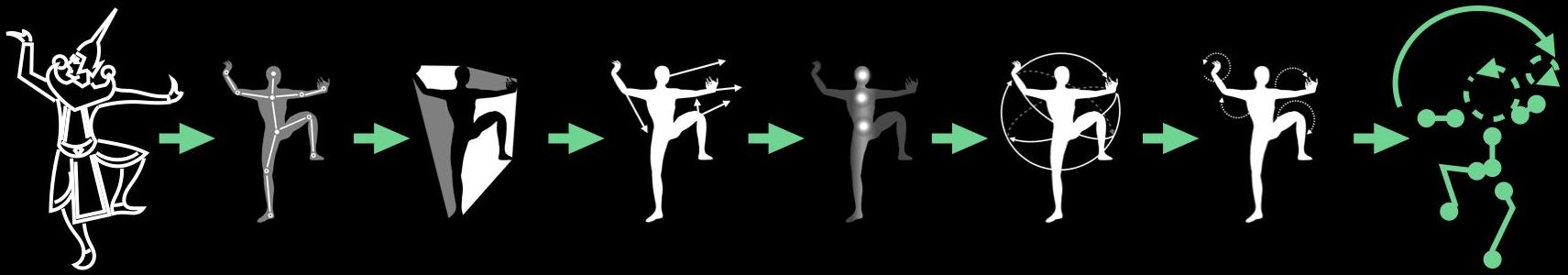


Shifting Relations



▼ All Rotations		
x		1
y		3
z		1

▼ All Rotations		
x		1
y		1
z		1



```
> energy  
> circle and curve  
> shifting relations  
> external body space  
> rotations  
> reset  
> dance speed  
> dancers
```



```
> energy > upper body > 100% → ? (0% - 300%)  
< go back
```



**> executed** > rotations > y > 50%

```
$ energy reset  
$ rotations x 50 percent  
$ rotations reset  
$ rotations z 50 percent
```



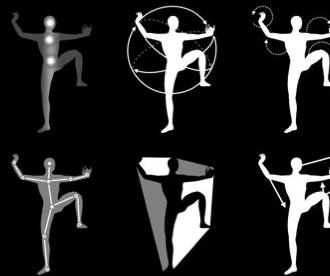
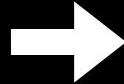
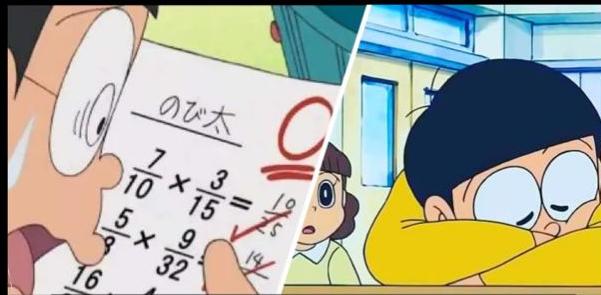
**> executed** > energy > upper body > 50%

```
$ energy reset  
$ rotations x 50 percent  
$ rotations reset  
$ rotations z 50 percent  
$ rotations reset
```





# hackable cultures leads to creative builders!



# Cyber Subin

Co-creator:  
Pichet Klunchun  
Pat Pataranutaporn

Choreographer/Director:  
Pichet Klunchun

Dancers:  
Padung Jumpan  
Tas Chongchadklang  
Chang Hong Chung  
King Fai Tsang

Music Director and Composer:  
Lamtharn Hantrakul

3D and Animation Creator:  
Piyaporn Bhongse-tong

Creative Technologist:  
Phoomparin Mano  
Chayapatr Archiwaranguprok

Cyborg Scientist/Philosopher:  
Pat Pataranutaporn

Lighting Designer:  
Ray Tseng

Dramaturg:  
How Ngan Lim

Producer:  
Sojirat Singholka

Stage Manager:  
Jirach Eaims-Ard



Thank you!

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