# Embedding & Calling Python

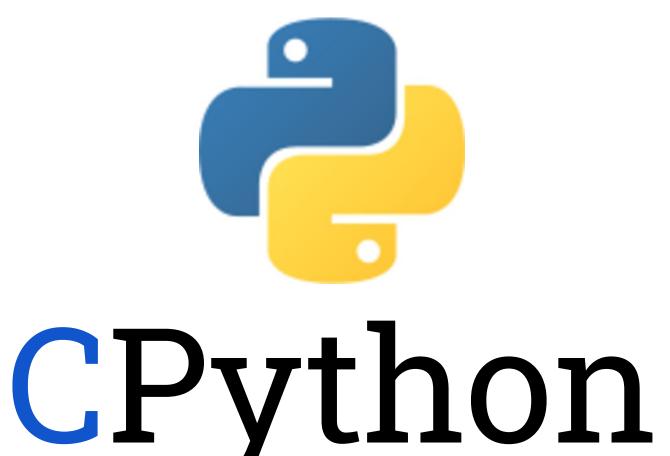
with 0 Serialization and ε Memory

#### Miki Tebeka



CEO, CTO, UFO ...

353solutions



### Glue Language

Duct tape is like the force. It has a light side, and a dark side, and it holds the universe together.

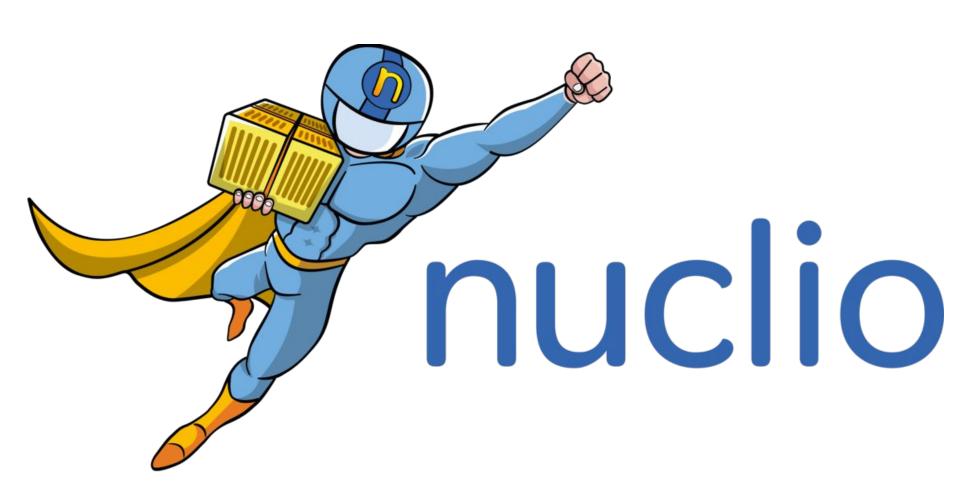
Carl Zwanzig

## Extending and Embedding the Python Interpreter

https://docs.python.org/3/extending/index.html

## UPON A TIME





Q: What's the difference between a dead project and a dead cow?

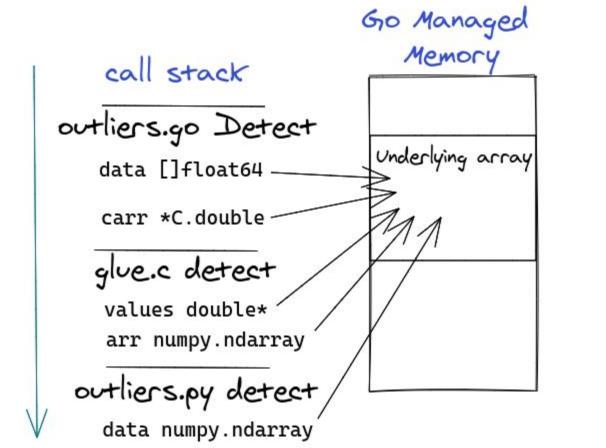
A: You can still milk a dead project!

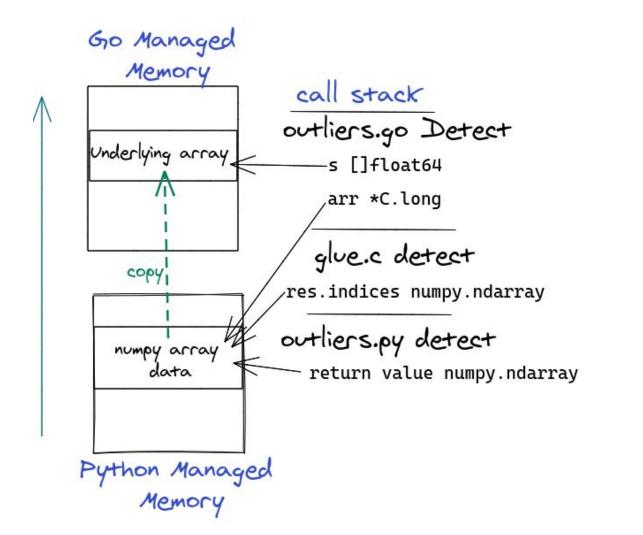


## Simple

#### Assumptions

- Go's float64 & numpy's float have the same representation in memory
- numpy arrays are contiguous in memory





### Python/C API Reference Manual

https://www.ardanlabs.com/blog/2020/09/using-python-memory.html

## Outliers

#### What's Left?

- Goroutine/thread safety (GIL)
- Better error recovery
- Memory leaks?
- ...

### Thank You!