

+98 9136028987

Iran, Isfahan

mahdihaghverdiliewpl@gmail.com

Mahdi Haghverdi

Back-end / Junior Developer

Persian articles on [virgool](#)

English articles on [medium](#)

github.com/mahdihaghverdi

4-year Python developer spent time in learning Python deep and well. Interested in PEPs and How things work in CPython. Regular writer. Committed in learning continuously and staying up-to-date with latest technologies.

SKILLS

Tools and Languages

Python

FastAPI

PostgreSQL

SQLAlchemy

Docker

LaTeX

Git & GitHub Actions

Unit-Test

PyTest

Poetry

RESTful

Agile

PROJECTS

SimpleRESTBlog — [link](#)

- A simple RESTfull blog API, with the CRUD on blog posts and support a high performance comment management system written in Python with FastAPI and PostgreSQL.

postfixcalc — [link](#)

- A library which provides the API to get an arithmetic expression as `str` and parse and evaluate that *safely* using postfix method.

plumacalc — [link](#)

- A django app which uses postfixcalc to create a web based, self hosted calculator.

listappend — [link](#)

- Python implementation of `PyListObject` and its append mechanism for the article:

- [How Append Works \(Persian\)](#)
- [How Append Works \(English\)](#)

timetp — [link](#)

- A tokenizer and a parser written based on a DFA
- For full explanation read the article of this project at [Let's write a tokenizer and a parser](#)

OPEN SOURCE CONTRIBUTION

Aggify — [link](#)

Aggify is a Python library to generate MongoDB aggregation pipelines.

- Submit 9 pull requests which got merged into the main branch — [link](#)
- Implement one pipeline stage: `$out` — [Pull Request #13](#)
- Make the test coverage of Aggify 100% — [Pull Request #42](#)
- Fixed issues: [#16](#) and [#18](#)
- Aggify's test CI/CD in GitHub Actions now runs Python 3.8, 3.9, 3.10, 3.11 and 3.12 — [Pull Request #43](#)

ARTICLES

Timsort Algorithm Explained — [link](#)

- Full coverage and explanation for `timsort` algorithm.

Let's Write a Tokenizer and Parser — [link](#)

- A comprehensice walk through of studing the theory of automata, writing a RegEx, drawing a DFA and implementing a tokenizer and a parser out of them.

What's New in Python 3.12 — [link](#)

- Point to point, PEP to PEP and issue to issue of *What's new* in Python 3.12 stable release.

Deep Dive Into Object and Types in the C Layer of CPython

- How objects and types are implemented in CPython?
- written in [Persian](#) & [English](#)

How `list.append` Works In CPython's C Layer?

- How does CPython do an `list.append` exactly?
- written in [Persian](#) & [English](#)

Python is TOO Fast — [link](#)

- Is Python fast or slow? Let's have a discussion.

Python asyncio And TaskGroups — [link](#)

- Python `asyncio` module has a new type (from 3.11) called `TaskGroup`. Let's see why it was important to have it in `stdlib`.

Python Standard Library vs. PyPI — [link](#)

- How Python `stdlib` differs from PyPI?

Python, A Language For Companies Seeking High Performance — [link](#)

- Should the High-tech companies and startups use Python for their product or not?

CPython Will Be 5x Times Faster — [link](#)

- How faster CPython team will improve the performance of Python?

More in here: <https://virgool.io/@liewpl/>