Petar Maric

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Summary

An avid Open Source Software supporter with a PhD in Applied Computer Science. Particularly fond of Python and Django powered web development. Specializes in rejuvenating brownfield projects, by minimizing the technical debt, introducing new (automated) development/deployment processes, increasing overall code quality, seeding the quality-first development culture, and leading the development team by example. Interested in research or development with a multi-disciplinary team. Passionate about working on state-of-the-art technologies and making cool stuff. And with me, every day is load test day.

Selected Skills

Python, Django, web development, software design, managing/reducing technical debt, metaprogramming, distributed computing, *nix system administration, load testing, proof-driven performance optimization, proof-driven debugging, web spiders, parsers, scientific computing, numerical analysis, information visualization, LaTeX, Sphinx, Docker, Packer, Vagrant, Celery, FastAPI, HDF5.

Career Triangle

Independent Software Consultant

Software Developer, March 2009 – Present

Seasoned Python developer with a strong passion for web, scientific and distributed computing.

Faculty of Technical Sciences, University of Novi Sad

University Professor, December 2016 – February 2022
Teaching Assistant, October 2009 – December 2016

Responsible for teaching Programming languages and data structures, Computer architecture, Compilers, Distributed computing to thousands of future engineers, their evaluation and grading.

Open Source Software

Software Developer, August 2005 – Present

Contributing Member of the Python Software Foundation, with 40+ Open Source projects created, innumerable Open Source projects contributed to, and 28 Python packages published on the Python Package Index.

https://github.com/petarmaric and https://pypi.org/user/petar/

Created and managed the official country level mirrors for CTAN (Comprehensive TeX Archive Network), Ubuntu, Arch Linux, MariaDB, CentOS, Debian, MX Linux.
Very early (since 2005) adopter and contributor to Django.

Education

Faculty of Technical Sciences, University of Novi Sad

PhD in Electrical and Computer Engineering – Applied Computer Science, 2009 – 2016
Thesis: *A hybrid software architecture for supporting the harmonic coupled finite strip method*
Research areas: finite strip method, distributed computing, numerical analysis, metaprogramming
Research projects:

[2011 – 2022] "Computational Mechanics in Structural Engineering", ON174027, Ministry for Science and Technology, Republic of Serbia.

Faculty of Technical Sciences, University of Novi Sad

Master of Electrical and Computer Engineering – Applied Computer Science, 2003 – 2009
Thesis: *Django based framework for online opinion research systems*

Summarized Commercial Experience

Stackry LLC
Software Architect, October 2024 – Present

Spearheaded technical debt reduction, system modernization and quality-first culture implementation in a legacy Java product by establishing TDD practices and documentation standards, while identifying security/performance risks, automating workflows, improving team scalability through process optimization and knowledge sharing initiatives – to accelerate onboarding and reduce team "bus factor".

360dialog GmbH
Senior Software Engineer/Lead Product Site Reliability Engineer, July 2023 – August 2024

Promoted from get.chat (360dialog's spin-off company) to architect the company-wide Performance Assurance Initiative, establishing a load testing (sub)project framework (Python/Locust) and mindset (codified in "Tao of load testing" document); while driving cultural transformation through mentorship, technical debt reduction, security hardening, FastAPI microservice template development, uncovering critical system vulnerabilities (such as complete resource exhaustion), introducing Open Source culture, enabling 10x growth capacity via extensive load tests and scalable engineering practices.

get.chat sp z o.o.
Senior Software Engineer, July 2021 – September 2023

As 3rd developer hire at get.chat (later promoted to 360dialog, its parent company) drove technical transformation by eliminating MVP's technical debt, security issues and increasing test code coverage from 0% to 70+% (personally created 1000+ unit tests); reduced developer onboarding from weeks to days while establishing quality-first culture; architected the Babelfish distributed event processing platform (Python/SDK) with continuous load testing - later adopted as a blueprint for company-wide initiatives.

DigitalMR LTD
Senior Software Engineer/Systems Architect/Enterprise Software Architect, June 2020 – September 2021

Promoted from developer to software architect at a market research leader, spearheaded modernization of legacy Django platform (from 1.11 to 3.2) while reducing technical debt, increasing test code coverage from 0% to 75+% (personally created 2500+ unit tests), implementing CI/CD pipelines, automated load tests, cloud-native architecture - overcoming cultural resistance to establish quality-first practices, modern development processes and lead geo-distributed teams through hands-on technical leadership.

CitiDexLI, Inc.
Senior Software Engineer, January 2010 – December 2016

Modernized a popular 19 year-old information directory business by unifying fragmented legacy systems into a centralized Django platform as a sole developer, reducing OPEX by half via cloud migration while implementing security hardening, automated monitoring and cost-effective infrastructure upgrades – resolving scalability issues and technical debt accumulated across multiple developer generations.
Found and reported a Horde/IMP related remote code injection vulnerability in Plesk 8.6 (not credited).

High Score Society
Software Developer, August 2009 – October 2009

Improved Django powered gamer community and prepared it for launch. Updated project code to Django 1.1, fixed bugs, refactored and cleaned up code, implemented new features, improved scalability by moving CPU and network intensive operations out from the HTTP request/response lifecycle.

mesawarati
Software Developer, March 2009 – April 2009

Implemented a Django based photo gallery that supports content in multiple languages. Fixed bugs, implemented i18n-ized content, refactored code, contributed patches to related Open Source projects.