

SENIOR PYTHON/WEB/DEVOPS DEVELOPER & AI OVERLORD

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Areas	EXPERTISE IN PYTHON LANGAGE AND DJANGO FRAMEWORK AGILE DEVELOPMENT OF APPLICATIONS AND WEBSITES EXPERIENCES IN FASTAPI, VUEJS, CYBER-SECURITY & CRYPTOGRAPHY, EMBEDDED DEV, ANDROID AND IOS PYTHON PORTS STRONG SOFTWARE ARCHITECTURE VISION, FROM MODULITH TO EVENT-DRIVEN MICROSERVICES. EXPERIENCE IN AI-ASSISTED SPEC-DRIVEN-DEVELOPMENT
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Languages	Python & Web expertise (Html5, CSS3, Javascript, CORS) Data languages (csv, json, yaml, xml, parquet, rst...) Understanding of Java, C, C++, PHP, Golang, Bash... Technological monitoring on other languages (Pypy, Rust, Ruby, WebAssembly...) and on desktop/web/mobile technologies
Libraries	Django , Django-Cms, Django-Rest-Framework, Sqlalchemy, FastAPI , SCSS, VueJS , JQuery, Gettext, Selenium, Pywinauto, RobotFramework, Kivy... DBA (PostgreSQL, MongoDB, Redis, Memcached, ZODB...)
Internet	Nginx, uWsgi, Apache configuration RPC and Restful webservice
Embedded	Raspberry PI, Arduino, ESP32 and MicroBits, MSP430, coded in MicroPython or C. Knowledge of embedded protocols (SPI, I2C, I2S, UART...)
Methodologies	AI Spec Driven Development (Openspec) , Design Patterns, Concurrency and parallelism management, Source versioning, Unit and functional testing, Continuous integration, Automated documentation, Monolith vs Microservice architectures, DDD/CQRS/Hexagonal and Event-driven architectures
Networks	OSI model, Ethernet/Wifi/Bluetooth/BLE, UDP/TCP/IPv6, DNS, HTTP, SSH/SFTP, POP/SMTP, SSL/TLS security...
IDE and Tools	Git, Pycharm Pro, VisualStudioCode, LibreOffice, 3D creation (3dsmax...) and 2D creation (Gimp/Inkscape), Jira/Slack/Mattermost/Confluence
Systems	Devops Automation with Ansible Basics of Cloud management on AWS and Openstack System administration under Linux (Ubuntu) and Windows Virtualization of systems under Docker, Vagrant, VirtualBox, Hyper-V

Github depots – <https://github.com/pakal/> and <https://github.com/WitnessAngel/>

- * Founder and lead-dev of the **Witness Angel project** (<https://witnessangel.com/>)
- * Developer and author of the roleplay games of Chrysalis (<http://chrysalis-game.com>)
- * Python package author: Rsfile and Django-compat-patcher

Telecom ParisTech	Engineering degree - IT & Management course	2008
Preparatory classes	Star MP section at the Lycée du Parc (Lyon)	2005
Baccalaureate	S Series, mention Very Good	2003
LANGUAGES	High level in French (writing novels and essays) Fluent English, technical IT vocabulary German (basics) and Japanese (basics)	

05/2026 – 10/2026: Lead Software Architect on Magmalys SFINX project

05/2025 – 04/2026: FastAPI/PostgreSQL developer for Bedrock Streaming on AWS

11/2024 – 04/2025: FastAPI/PostgreSQL developer for EDF-SolutionsSolaires on AWS

2019 – 2024: Web missions for Lorkid SAS, S2E Consulting, and MonUnivert (Python & VueJS, PostgreSQL, Leaflet maps)

01/2021: Design of Python certifications for Isograd

10/2020: Integrated freelance at Stormshield: Development of a Dashboard for automated tests on Windows virtual machines

12/2019 – Teaching of Python/Git courses at Webtech/Ynov in Lyon

08/2019 – 11/2019: Freelancer at Stormshield: Implementation of automated tests of HMI, USB keys, and migration of the code base to Python3

08/2018 – 05/2019: IT Course Mentor, training of employees in Python/Django, pre-study of concepts for future startups, writing of technical tests.

05/2017 – 07/2018: Freelance integrated into Askin: Development of intranets and websites in Django, collaboration on a multi-cloud deployment software package for Altair.

02/2017 - 03-2017: Part-time assistant at the Faculty of Sciences of St Etienne: Supervision of TDs and TPs on Bash and Python for students in Math/Physics/Chemistry/info.

05/2016 – 05/2017: Freelance services for startups: Development of a SAAS Business Intelligence platform in Django for Creavalue.com; Code audit (robustness, scalability, security) and technical advice from the company Convergence.link; Support from BaguetteAcademy.com (security/performance)

06/2014 – 06/2016: Co-founder and CTO of Upfit SAS: Creation of a web plugin (AngularJS & Responsive Design) for clothing size advice for E-commerce sites, as well as associated Python webservices and extranets, with BigData algorithms.

10/2009 – 03/2016: Freelance service provider at SFR: Software architect, lead developer, and sysadmin on the PIMS framework: a multilingual platform (flat files, html, soap, xmlrpc, jsonrpc, REST, etc.), operating synchronously and in asynchronous, and offering services to both fixed and mobile users

09/2008 – 10/2009: Missions with Alten SIR, for Orange, Orange Labs, Eutelsat and Musiwave: C++/PHP/Python/MySQL web & network applications

Lead Software Architect on Magmalys SFINX project (Lyon) 05/2026 – 10/2026

AI-driven Development of a modulith system using DDD/CQRS/Hexagonal/Event-driven principles.

Rigorous unit/e2e testing, and advanced CI/CD using homemade architecture checkers.

Automated documentation system to overview data flows through the architecture.

Systems	Linux
Languages	Python3
Tools	ClaudeCode via Openspec, Django, PostgreSQL, Playwright; Ansible

Senior Developer at Bedrock Streaming (Lyon) 05/2025 – 04/2026

Development and monitoring of a high-throughput DATA API for streaming platforms.

Unification of microservices under a common CI/CD.

Refactoring of the surveillance dashboard, using Terraform+NewRelic

Systems	AWS, Kubernetes, Terraform
Languages	Python3, a bit of Golang
Tools	FastAPI, Pytest, NewRelic, DynamoDB, Algolia

Senior Developer at EDF-SolutionsSolaires (Limonest) 11/2024 – 04/2025

Development of a monitoring platform for solar installations, and maintenance of the previous software.

Conception of a software architecture and a software ecosystem, for Restful APIs and for a Data Ingestion system.

Design workshops with supervisors of solar installations.

Analysis and bugfixing of an old codebase base on AWS lambdas, stepfunctions, S3 and SQS.

Systems	Windows-WSL, AWS, Amazon Workspaces
Languages	Python3
Tools	FastAPI and its ecosystem, Ssqlalchemy, Pytest

Lead Web Developer Missions WEB (Lyon) 12/2019 – 11/2024

Development of software applications for Lorkid SAS, S2E Consulting, and MonUnivert, with standard web pages, Single Page Applications and REST web services.

For Lorkid :

- Development of a secure extranet for exchange of medical records in Python/Django
- Development of a generic low-code extranet engine, with evolved permission systems and mini-workflows configurable in JSON, in Python/Django

For S2E Consulting :

- Full stack development of a SAS (VueJS/Django/DRF/Postgres) for the safety of international travelers, with geolocation, handling of plane flights, cartography, and emergency processes

For MonUnivert :

- Full stack development of a SAS (VueJS/Django/DRF) to visualize and improve the mobility of corporate employees, with advanced Leaflet cartography, optimized filtering engine, computation of statistics, and generation of Weasyprint PDF reports. I also added comprehensive backoffice and selfcare sections to the server backend.

Systems	Windows 11, Ubuntu Linux
Languages	Python3, Javascript
Tools	Django, Django-Rest-Framwork, VueJS, Websockets, Weasyprint, Leaflet

QA Developer Mission at Stormshield (Lyon)***10/2020 - 01/2021***

Development of a support portal for automated tests, with details of results, graphs, statistics, timelines, and remote configuration of the test launcher

Systems	Windows7/8/10 under Hyper-V
Languages	Python3
Tools	Django, RobotFramework, Vis-Timeline

QA Developer Mission at Stormshield (Lyon)***08/2019 – 11/2019***

Mission in agile Scrum development for the automation of WPF GUI tests, with advanced reporting (video screen captures, logs, json exports).

Automation of USB key plugging/unplugging tests.

Migrating the code base from python2.7 to python3.7

Systems	Windows7/8/10 under Hyper-V
Languages	Python2&3
Tools	PywinAuto, RobotFramework, WxWidgets, Powershell

Developer Collaborator at Altair (Paris)***12/2017 – 08/2018***

Mission in agile Scrum development with around ten employees working remotely, on a microservices architecture.

Integration of connectors to deploy and manage calculation jobs on Oracle and Openstack clouds.

Architecture developments to decouple the different connectors and factorize the code.

Development of tools on rabbitMQ (including RPC system)

Systems	Clients under Fedora, Servers under CentOS
Languages	Python2&3
Tools	Docker, Salt, Mistral, MongoDB, PostgreSQL, RabbitMQ

Creation of a web plugin (AngularJS) for clothing size advice for E-commerce sites, and associated Webservices and Extranets.

Issues: autoconfiguration of the plugin by webscrapping and AJAX/CORS calls, isolation against CSS and JS of the original product page, graphic and behavioral customization by SASS variables and YAML conf, compilation and minification workflow with Grunt, tests with Pytest and Selenium, management of size guides and product lists, production of analytics, Scipy and R algorithms (measurements, morphology, Big Data, etc.) to determine the size to recommend, hierarchical conf and data validation schemes, code -weekly reviews.

Systems	OVH Ubuntu servers
Languages	AngularJS, JQuery, Grunt, Sass, Python3, Numpy/Scipy, R

Developer of service provider at SFR (Paris)**10/2009 – 03/2016**

Creator, software architect, MYSQL DB admin, lead developer and operator on the PIMS framework: a multilingual platform (flat files, html, soap, xmlrpc, jsonrpc, REST, etc.), operating synchronously and asynchronously.

Rapid development of webservices and web pages, to provide service intermediation between SFR information systems and external partners (dropbox, spotify, coyote, telmap, etc.), as well as authentication (sfrtv, sfrwifi, etc.) and Customer Service.

Unit tests, deployment of the application on our Freebsd servers, QoS management, various stats reporting for the CRM department.

From February 2015, teleworking support 1 day/week to make the transition

Systems	Freebsd Servers
Languages	Python, Bash
Frameworks	Sqlalchemy, Django, JQuery, Spyne, Suds, Jsonrpc...

Alten missions for Orange, Orange Labs and Eutelsat (Paris)**04/2009 – 10/2009**

- Debugging a network flow filtering system in C++ (anti-DDOS).
- Creation of a small Joomla PHP portal for satellite dish installer technicians.
- Python/C++ script to demerge professional clients, by wrapping C++ CGIs using SWIG.

Systems	Unix servers, Windows clients
Languages	PHP4/5, Bash, C++,Python

CDI Alten mission at Musiwave – A Microsoft Subsidiary (Paris)**09/2008 – 04/2009**

General context : Technical assistance for a company selling music on mobile phones and websites

Project subject: Maintenance and evolution of European wap/web portals, refactoring of parts of the Musiwave framework, development of internal content management tools

Responsibilities held: Autonomous developer, then member of the T-Mobile Scrum team

- Development of Wap pages in pml/wml/xhtml with Smarty Template Engine
- Extension of a web interface for exporting XML and multimedia content to FTP

- Creation of the content selection interface
- Transaction history management
- Setting up automatic export tasks
- Grouping similar APIs from the Musiwave framework into a single trunk
 - Analysis of differences
 - Merging sources
 - Writing unit tests (Bash/PHP)
 - Documentation of new features
 - Management of the transition to production of the new API
- Debugging, improvement (search engines) and securing existing portals
- Creation and documentation of the local deployment of a copy of the framework (php, aspx, sql) of Musiwave, on Hyper-V virtual machines.
- Added new purchasing methods to T-Mobile Web/Wap portals
- Conducting a technical conference on Python

Systems	Unix servers, Windows clients
Languages	PHP4/5, Bash, Smarty, XML & derivatives
Tools	SFTP edition with UltraEdit, SSH with Putty, Webtests under Visual Studio, Subversion, Hyper-V
Others	Practice written technical English

Internship at TeamTo Studio (Paris)

07/2007 – 01/2008

General context : *Development internship in a 3D animation studio*

Project subject: *Creation of an internal tool for visualizing sequences of images, videos and sounds, such as “FrameCycler”*

Responsibilities held: *Independent development work, from specifications to delivery*

- Specification and planning management
 - Collection of initial specifications from the technical director
 - Extension of specifications as the project progresses, at the request of users
- Performance evaluation of existing graphics libraries (Intel IPP, Libjpeg, DevIl, etc.)
- Writing the core of the image decompression/display engine in C++, with a RAM cache system, managed by a thread pool
- Creation of the graphical interface in wxPython, customization of the functionalities of this framework (adding transparency, intelligent message queues)
- Linking these two heterogeneous modules using Swig “wrappers”
- Added features
 - Reading and graphic representation of sound
 - Multi-level XML playlist system (variable framerate, mix of images, sounds, videos, etc.)
 - Persistent management of user options
 - Serial key protection module
 - File cache system on local disk
 - Playlist import/export system (to archives, to quicktime video, etc.)
 - Cache status visualization bar
 - Keyboard shortcuts, various screen modes, reading
 - Interfacing with information from the company's internal network
- Testing and delivering the program as a Windows executable with Py2exe

Material	Desktop Stations
Systems	Windows
Languages	Python & C++, many third-party libraries
Tools	Eclipse, Visual Studio 2005

- Installation and configuration of Apache servers
 - LAMP under Ubuntu, WampServer and EasyPhp under Windows;
 - Main features of php.ini, operation of htaccess;
 - Use of PhpMyAdmin for managing MySql databases;
- Full development in PHP/MySql (CSS except) of the “LBA Relentless Movie Project” website
 - Provision of hundreds of multimedia files;
 - Pages reserved for members to organize the Workflow;
 - Back Office for managing news, files and tasks;
- Community forum in PHPBB
 - Added numerous PHP hacks (management of uploads, captchas, access restrictions);
- Development of personal websites with the most famous CMS
 - Joomla 1.0 and 1.5, with many extensions (mxcomments, advancedMenu...);
 - DotClear and various plugins;
 - Drupal;
 - PHPMyNewsletter;
- Development with CodeIgniter of a “travel blog” PHP engine
 - Pure MVC development in PHP5 (object-oriented);
 - Back Office for writing tickets and managing attachments;
 - Administration actions in Ajax with JQuery;
 - Displays of sounds and videos with javascript or flash libraries;
- Volunteer creation of a DB and image migration script, from SMF to Liferay, for the Phare association forum

- Thesis on path search algorithms in graphs (C++);
- Team projects in Java:
 - Network Naval Battle (with animations and music)
 - Boxing fight simulation (threads and competition management);
 - FrozenBubble mod as a web applet
- 3D engine in C++/OpenGL, with import of shapes and animations from the X3D format;
- Small vector drawing application in C++, with the Qt library;
- Basic installation of Tomcat servers, with J2EE and WebServices;
- Thesis on Design Patterns, comparison of their implementation in static and dynamic languages (C++ and Python);
- Ultra-secure remote text reading application (data encrypted and stored on the internet), in python (with urllib2, pyCrypto, Py2exe, etc.);