**Paolo Williams**

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# SUMMARY:

* 6 years of experience as a **Python Developer,** proﬁcient coder in multiple languages and experience in Design, Development, Implementation of **Python, Django**, **Flask, Pyramid** and client-server technologies based applications, **RESTful services, AWS, C, C++**, **JAVA and SQL**.
* Experience in all phases of Software Development Life Cycle Process across various workflows (Requirement study, Analysis, Design, Coding, Testing, Deployment and Maintenance) in Web & Client/Server application development.
* Extensive experience in developing web applications using **Python, Django, Flask, Pyramid, Sanic**frameworks**.** worked with several python libraries including **Beautiful soup, Twisted, NumPy, matplotlib, SciPy, PyQt, Scapy, SQLAlchemy,Boto, logging, Nose, Blaze, Hug.**
* Good experience in developing web applications implementing **MVT**/**MVC** architecture using **Django**, **Flask**, **Webapp2**and **spring** web application frameworks, with good understanding of **Django ORM** and **SQLAlchemy.**
* Hands-on experience with industry-standard IDEs like **PyCharm, Sublime, Emacs,Eclipse, NetBeans**, **Intellij, TOAD.**
* Extensive experience in developing applications by implementation of web based and client/server application using **HTML**, **Bootstrap**, **PHP**,**CSS**, **JavaScript, Bootstrap, D3.js,** andvarious**Java/J2EE**technologies.
* Good experience in **Shell Scripting, Oracle RDBMS, SQL Server, Unix and Linux.**
* Good knowledge of **TCP/IP, UDP, HTTP, HTTPS, SSH** and **SSL** protocols.
* Experience working with Docker components like creating **Docker** images compose **Docker** registry and handling multiple images primarily for middleware installations and configurations.
* Expert at version control systems like **Git,SVN**and**CVS**, Migrated repos from svn to Github.
* Experienced in requirement gathering, use case development, Business Process flow, Business Process Modeling: extensively used **UML** to develop various use cases, class diagrams and sequence diagrams.
* Proficient in writing **SQL** Queries, Stored procedures, functions, packages, tables, views, triggers using relational databases like **Oracle, DB2, MySQL and MSSQL Server.**
* Experienced with databases using **ORMs/DOMs** for integrating with **MySQL**, **Postgres**, **MongoDB**, **Cassandra and SQLite**. Also, experienced with writing custom queries through database connectors.
* Good Experience in **Linux Bash scripting** and following **PEP** Guidelines in **Python**.
* Developed consumer based features and applications using **Python**, **Django**, **HTML**, Behavior Driven Development (**BDD**) and pair based programming.
* Using **Django evolution** and manual **SQL** modifications, able to modify **Django** models while retaining all data, while site was in production mode.
* Used **Request library** and**Json**to interact with **Rest** services and ininteracting with **Database**.
* Experience in **GoLang** concepts like Slices, Maps, Structs, Interfaces, Go routines and Channels.
* Deployed production site using **Apache 2.0** with **Mod python**.
* Experienced in **Unit testing**,**SystemIntegration testing(SIT)**, **User acceptance testing(UAT)**, **Functional testing**.
* Expertise in working with GUI frameworks like **Pyjamas, Jython, PyQT.**
* Experience with source code testing frameworks like **JUnit, PyUnit.**
* Good experience in working with Web services like **Amazon AWS EC2, S3, SES, ELB, EBS.**
* Strong knowledge of Data Structures and Algorithms, Object Oriented Analysis, machine learning and software design patterns.
* Good understanding of Garbage collector interface implemented it with **CPython**.
* Thorough knowledge of **C**and**C++** languages including STL, threads, templates, dynamic polymorphism and other OO concepts.
* Worked closely with designer, tightly integrating Flash into the **CMS** with the use of **Flashvars** stored in the **Django** models. Also created **XML** with **Django** to be used by the **Flash**.
* Hands on Experience in **Data mining** and **Data warehousing** using **ETL** Tools and Proficient in Building reports and dashboards in **Tableau** (BI Tool).
* Excellent Experience and knowledge in using **XML**, **SOAP**, **REST** web Service for inter operable software applications.
* Good knowledge in working with Web/application server-**Apache Tomcat, Tornado, CherryPy, Chaussette, Rocket.**
* Experienced in developing API services **Python/Tornado** while leveraging **AMQP and RabbitMQ** for distributed architectures.
* Highly motivated, quality minded developer, with proven ability to deliver applications against tight deadlines.
* Hands on experience with bug tracking tools **JIRA** and **Bugzilla**.
* Skilled in **debugging/troubleshooting issues** in complex applications.
* Attentive to cyber security and data protection. Performed code reviews and implemented best Pythonic programming practices
* Knowledge of deployment tools using **Jenkins, Pylint, Cppcheck and Coverity**.
* Experience in Agile development processes ensuring rapid and highquality software delivery
* Experience in all phase of **SDLC** like Requirement Analysis, Implementation and Maintenance, and extensive experience with **Agile** and **SCRUM.**

# Technical Skills:

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| Languages | Python, C++, Java,SQL, PL/SQL. |
| IDE’s | PyCharm, Emacs, Eclipse, NetBeans, MS Visual Studio,Sublime, SOAP UI |
| Web Technologies/other | Django, Flask, Pyramid, Servlets, JSP, AJAX, HTML5, CSS3, XML/XSD, X Path, XSLT, Java Script, jQuery, Web Services (Soap, Restful), Amazon Webservices like EC2, S3, ELB, EBS, SES, Selenium, PyUnit. |
| Databases | SQL Server, Oracle 9i/10g/11g, MySQL, PostgreSQL, SQLite, Cassandra. |
| Frameworks | Django, Flask, Bootstrap, QTCherryPy, web2py, Tornado, Pyramid, Robot |
| WebServers | JBoss 4.0.5, BEA Web Logic, Web Sphere, Apache Tomcat 5.5/6.0 |
| Version Controls | SVN, VSS, CVS, Git, Git. |
| Operating Systems | MS Windows 9X/NT/XP/2003, Linux/Unix, Sun Solaris, OS X |
| Building& Design Tools | ANT, MAVEN, Gulp, UML, IBM Rational Rose, Ansible, JIRA, GNU Debugger Bugzilla |
| Methodologies | Agile, Scrum, Waterfall |

# PROFESSIONAL Experience:

# Client: Wells Fargo Charlotte NC.

**Role:** Sr. Python Developer **March, 2016– Present**

**Responsibilities:**

* Gathering requirements and translating the business details into Technical design
* Implemented responsive user interface and standards throughout the development and maintenance of the website using the **HTML**, **CSS**, **JavaScript**, **Bootstrap, JQuery**.
* Developed views and templates with **Python** and **Django's** to create a user-friendly website interface.
* Used **Gulp** as a task/build runner for development. Developed and tested many features for dashboard using**Python**, **HTML, JavaScript, CSS and Bootstrap,**
* Utilized Python libraries like **wxPython**, **NumPy**, **Twisted**, **PyQT, Web2py, Pygal, Plot.ly**.
* Designed RESTful Webservices using **FLASK**, with emphasis on improved Security for the service using **FLASK-HTTPAuth**with**HTTPS**. Also utilized Hug libraries to develop HTTP REST API’s to provide validations and used **CherryPy** framework to model and bind HTTP.
* Worked with **Boto3** as interface for AWS API and **TensorFlow** to make numerical computations using data flow graphs.
* Developed various API’s for Django applications using **Django-tastypie**.
* Used Amazon Elastic Beanstalk with **Amazon EC2** instance to deploy Django project into **AWS**. Configured continuous integration with **Jenkins** on **Amazon EC2**.
* Implemented **SQLAlchemy**as ORM mapping tool for complete access and Wrote SQL queries and maintained PostgreSQL RDBMS in the local development environment.
* Wrote and executed various **MySQL** database queries from python using **Python-MySQL** connector and **MySQL DB** package.
* Managed large datasets using **Pandas API** ecosystem to analyze the different segments of customers based on Location.
* Experience in creating **Docker** containers leveraging existing Linux Containers and AMI's in addition to creating Docker containers from scratch.
* Worked on creating the **Docker** containers and Docker consoles for managing the application life cycle.
* Setup Docker on Linux and configured Jenkins to run under Docker host.
* Used advanced packages like **Mock, patch** and **Beautifulsoup (b4)**in extracting the Data during development phase and perform unit testing.
* Development of **PythonAPIs** to dump the array structures in the Processor at the failure point for **debugging**.
* Performed troubleshooting, fixed and deployed many Python bug fixes of the two main applications that were a main source of data for both customers and internal customer service team.
* Creating **RESTful** web services for Catalog and Pricing with **DjangoMVT**,**MySQL**, and **MongoDB**.
* Fixed bugs, providing production support, enhanced applications by improving code reuse and performance by making effective use of various design patterns.
* Collaborated within a team using an agile development workflow and widely-accepted collaboration practices using **Git**.
* Developed a fully automated continuous integration system using **Git, Jenkins, MySQL** and custom tools developed in **Python** and **Bash**.
* Implemented Multithreading module and complex networking operations like **raceroute**, **SMTPmail server** and **web server**Using **Python**.
* Used standard **Python** modules like**csv**,**robotparser**, **itertools**, **pickle**to ensure privacy of sensitive data.
* Implemented Garbage collection with **CPython** to enhance the performance, by garbage collecting the older generated objects.
* Automated **RabbitMQ** cluster installations and configuration using Python/Bash.
* Experience with Data migration from **Sqlite3** to **ApacheCassandra** database. **Cassandra** data model designing, implementation, maintaining and monitoring using **DSE**, **DevCentre**, **DatastaxOpscenter**.
* Written test cases using **PyUnit** and **Selenium Automation testing** for better manipulation of test scripts.
* Used automation Jenkins for continuous integration on **Amazon EC2**.
* Used **JIRA** for Bug tracking and issue tracking.
* Worked as part of an Agile/Scrum based development team and exposed to TDD approach in developing applications.

**Environment:Python 3.4/2.7,Django 1.7, CherryPy, HTML5, CSS, Bootstrap, JSON, JavaScript, AJAX, RESTful webservice, MongoDB, MySQL, SQLite, Cassandra, Docker, AWS (EC2, S3), PyUnit, Karma, Jenkins, Selenium Automation Testing.**

**Client: Caterpillar, Mossville IL.**

**Role:** Sr. Python Developer **April,2015 – February, 2016**

**Responsibilities:**

* Involved in the project life cycle including design, development and implementation and verification and validation
* Developed the application front end using **HTML, CSS, JavaScript, Bootstrap, Django** framework.
* Extensively utilized Python frameworks like **Django, Flask, Sanic, PyUnit and** libraries like**matplotlib.**
* Designed applications implementing **MVC** architecture in **Pyramid, Zope** frame works.
* Created a **Python**/**Django** based web application using Python scripting for data processing, **MySQL** for the database, and **HTML**/**CSS**/**JQuery** and **HighCharts, matplotlib** for data visualization of sales, tracking progress, identifying trends.
* Developed data-accessible web applications for employee accesses using **HTML5, CSS3, JavaScript** and **Django.**
* Fetched twitter feeds for certain important keyword using python-twitter library(Tweepy), Used **JSON** to store the twitter data which was further represented using matplotlib visualization and generated graphical reports forbusiness decision using **matplotlib** library.
* Participate in the design, build and deployment of **NoSQL implementations** like MongoDB.
* Added support for **Amazon AWS S3** and RDS to host static/media files and the database into **Amazon Cloud**.
* Worked on creation of custom **Docker** container images, tagging and pushing the images.
* Integrated to Google Cloud platform for large scale computing workloads.
* Extensive code reviewing using **GitHub** pull requests, improved code quality, also conducted meetings among Team.
* Developed server based web traffic using **RESTful API’s** statistical analysis tool using **Flask**, **Pandas**.
* Wrote **PL/SQL views, Stored Procedures, database triggers & Packages.**
* Implemented table sorting feature on the webpages regardless of the type of data types with the use of JavaScript.
* Enhanced by adding **Python XML SOAP** request/response handlers to add accounts, modify trades and security updates.
* Recording of Scripts Web Services **HTML** using **Vugen** and **SoapUI** and script validation through co correlations, parameterizations and other methods.
* Worked with **RDBMS** like **Oracle 11g/10i** and **MySQL databases** to query and read data.
* Developed various Python scripts to find vulnerabilities with SQL Queries by doing SQL injection, permission checks and performance analysis.
* Developed scripts to migrate data from proprietary database to **PostgreSQL**.
* Implemented continuous integration using **Jenkins and** involved in the deployment of application with Ansible automation engine.
* Created backend database **T-SQL stored procedures** and **Jasper Reports.**
* Performed **Unit testing, Integration Testing, GUI** testing using **Pytest** and web application testing using **Selenium Python bindings.**
* Designed many UML diagrams in Magic Draw for generating **C++** code on the fly.
* Used Embedded Coder for translating models into model source code and executable in **QNX** Real Time Operating System(**RTOS**) single-tasking mode.
* Writing the assembly language program and debugging.
* Developed applications in **QT** creator.
* Conversion of the analog to a digital voltmeter with the help assembly language and plc programming.
* Used **Selenium** Library to write fully functioning test automation process that allowed the simulation of submitting different requests from multiple browsers to web application.
* Debugged and Tested Android app using **Charles debugging** session as man-in-middle proxy and monitored traffic flow through the devices.
* logged user stories and acceptance criteria in **JIRA** for features by evaluating output requirements and formats.
* Executing regression tests on each release and verified bugs found from automation test in **Bugzilla**.
* Collaborate with Product Management and User Experience experts regarding product definition, schedule, scope and project-related decisions.

**Environment: Python 3.4/2.7, Hadoop, Django 1.7, HTML5, CSS, Bootstrap, JQuery, JSON, JavaScript, PostgreSQL, T-SQL, MongoDB, SoapUI, Vugen, DockerOracle 11g/10i, Charles Web Debugging, Ansible, MySQL, Google Cloud, Amazon AWS S3, Bugzilla, JIRA.**

**Client: Bloomberg, NYC NY.**

**Role:** Python Developer **Jan 2013– March, 2015**

**Responsibilities:**

* Involved in Design, Development and Support phases of Software Development Life Cycle (SDLC)
* Used Python scripts to generate various reports like transaction history, OATS, user privileges, limit rules and commission schedule reports.
* Built and maintained code libraries to support analytics using **NumPy** and **SciPy. Used Pygal and plot.ly** for visualization of the data retrieved **using Scrapy**.
* Worked on parsing of JSON data to be used in the project received by API calls using **Python Request library**.
* Used **Blaze Ecosystem, SQLAlchemy** to operate across various databases.
* Worked with**Scrapy** for webscraping to extract structured data from website to analyze the specific data of a website and work on it.
* Used Ansible for automated package deployment and server configuration.
* Performed data manipulation/storage for incoming test data using **lxml/etree libraries**.
* Designed the front end of the application using **HTML, CSS, AJAX, Bootstrap, JSON andJQuery**. Worked on backend of the application using Python, mainly using Active Records.Used**Python and Django** to interface with the **JQuery UI** and manage the storage and deletion of content
* Embedded **AJAX in UI** to update small portions of the web page avoiding the need to reload the entire page.
* Used **SVN, CVS** as version control for existing system.
* Creating and modifying webservices and stored procedures to implement new requirements using **Python**. Exposing services as **RESTful** services in **JSON** format for Admin UI which is developed using **Django**.
* Installation, configuration and administration of Virtual Box and VMware virtual machine for RHEL, Ubuntu Linux servers.
* Extensively used **XML** and **RESTful** Web Services to retrieve and send data from different applications.
* Created **SQL Loader** scripts to load data into the temporary staging tables.
* Developed **DOM-based** interactive directory structure diagram with dynamically expandable directory trees.
* Used Robot framework for test Automation integrated with Jenkins.
* Used **JIRA** maintain system protocols by writing and updating procedures and business case requirements, functional requirement specifications documents
* Implemented unit testing using **PyUnit,** and tested several RESTful services using **SOAP UI**.
* Experienced in Agile Methodologies and **SCRUM** Process.
* Worked in development of applications especially in **LINUX** environment and familiar with all commands

**Environment: Python 2.7, Django 1.3, HTML5, CSS, Bootstrap, XML, AJAX, JSON, Blaze, JQuery, JavaScript, Oracle 11g/10i, MySQL, RESTful API’s,Linux, ROBOT framework, SoapUI.**