**Paul Mccoy**

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**Summary:**

* Overall 7 years of experience in software development and competent in web application developing using Python, C and C++.
* Good experience of software development in Python (libraries used: Beautiful Soup, NumPy, SciPy, matplotlib, python-twitter, Pandas data frame, network, urllib2, MySQL dB for database connectivity) and IDEs - sublime text, Spyder, PyCharm, emacs.
* Experienced with full software development life-cycle (SDLC), architecting scalable platforms, object-oriented programming (OOPs), database design and agile methodologies.
* Developed the required XML Schema documents and implemented the framework for parsing XML documents.
* Excellent knowledge on Predictive Modelling using python and K-mean Clustering for Python Machine Learning Language
* Good experience in Shell Scripting, SQL Server, UNIX and Linux.
* Created Python contents to robotize AWS administrations which incorporate web servers, ELB, Cloud front dissemination, databases, security gatherings and application design.
* Experience in handling database issues and connections with SQL and NoSQL databases like MongoDB (2.6, 2.4) by installing and configuring various packages in python (Teradata, MySQL dB, MySQL connector, Pymongo and SQL Alchemy).
* Good experience in developing web applications implementing MVT architecture using Django, Flask, Webapp2 web application frameworks, with good understanding of Django ORM and SQL Alchemy.
* Successfully migrated the Django database from SQLite to MySQL to PostgreSQL with complete data integrity.
* Good experience in working with Amazon Web Services (AWS) like AWS EC2, S3, VPC, SES, ELB, EBS, RDS, Glacier, Dynamo DB etc.
* MySQL dB for database connectivity and Cassandra to improvise software development process.
* Experience with Data migration from Sqlite3 to Apache Cassandra database.Experienced in following PEP8 coding standards across various projects and experience in Apache, Tomcat.
* Experienced in developing web-based applications using Python, Django, PHP, XML, CSS, HTML, Java Script and jQuery.
* Strong Knowledge of Hadoop and Hive and Hive's analytical functions.
* Capturing data from existing databases that provide SQL interfaces using Sqoop.
* Efficient in building hive and pig scripts.
* Having good experience in Hadoop Big Data processing. Expertise in developing the queries in Hive, Pig.
* Very strong full life cycle application development experience
* Having good experience in SALT Stack and Puppet for Deployment on Multiple platforms.
* Experience of Build and Deployment stage and utilization of Continuous Integration (CI/CD) apparatuses, construct arrangement, change history for discharges, Maintenance of assemble framework, computerization and smoke test forms, overseeing, designing, and keeping up source control administration frameworks.
* Installed and configured GIT and was responsible to work for commit, resolve conflict and merge, fetching code.
* Good Analytical and Problem-Solving skills and ability to work on own besides being a valuable and contributing team player.
* Practical experience with working on Multiple-Environments like Development, Testing, Production.
* Excellent Interpersonal and Communication skills, Efficient Time Management and Organization Skills, ability to handle Multiple-Tasks and work well in a Team-Environment.

**Work Experience**

**Sr. Python Developer**

**Dealer Track. Lake success, NY**

**December 2017 to Present**

**Responsibilities:**

* Representation of the system in hierarchy form by defining the components, subcomponents Used Django framework for application development.
* Involved in preparing engineering specification with OOA and OOD. Used UML Tools to develop Use Case diagrams, Class diagrams, Collaboration and Sequence Diagrams, State Diagrams and Data Modeling.
* Developed spark code using Scala and spark -SQL/Streaming for faster testing and processing of data.
* Booting up nodes using prebuilt images on Amazon EC2.
* Bootstrapping Amazon EC2 nodes with software you want running when your nodes boot up.
* Uploading, copying, downloading, and deleting files using Amazon S3.
* Assisted in reduction of cost and optimization of supplier selection for the CRM Applications.
* Created Restful micro services utilizing Flask and Django and sent on AWS servers utilizing EBS and EC2.
* Designed and developed a horizontally scalable APIs using Python Flask.
* Involved in back end development using Python with framework Flask
* Wrote Python modules to view and connect the Apache Cassandra instance.
* Created Unit test/ regression test framework for working/new code.
* Designed and developed the UI of the website using HTML, XHTML, AJAX, CSS and JavaScript.
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Wrote Python scripts to parse XML documents and load the data in database.
* Generated property list for every application dynamically using Python
* Experience with build architecture and automation, CI/CD, and troubleshooting complex dependency graphs.
* Using Subversion version control tool to coordinate team-development.
* Assisted with the addition of Hadoop processing to the IT infrastructure.
* Implementing customer data collection with PySpark/Hadoop analytics.
* Developed Hadoop integrations for data ingestion, data mapping and data processing.
* Responsible for debugging and troubleshooting the web application.
* Build all database mapping classes using Django models and Cassandra
* Experience in bash and python scripting with focus on Devops tools, CI/CD and AWS Cloud
* Used Machine learning techniques like unsupervised Classification, optimization and prediction.
* Utilized Pandas API to put the information as time arrangement and forbidden organization for east timestamp information control and recovery.
* Responsible for optimizing and reengineering some of the ETL jobs by improving SQL query performance and improving table projections in multi TB Vertica database
* Designed and developed data management system using MySQL.
* Built various graphs for business decision-making using Python matplotlib library.
* Created Python and Bash tools to increase efficiency of call Centre application system and operations; data conversion scripts, AMQP/RabbitMQ, REST, JSON, and CRUD scripts for API Integration.
* Created server monitoring daemon with Psutil, supported by Django app for analytics which I created. Also researched big data solutions with MongoDB database.
* Writing MapReduce job with Hadoop and MapReduce Java API. Analyzing Bigdata by transforming, normalization and joining data.
* Fetched twitter feeds for certain important keyword using Python -twitter library.
* Experienced in Agile Methodologies and SCRUM Process.
* Worked in development of applications especially in UNIX environment and familiar with all the commands.
* Collaborated with internal teams to convert end user feedback into meaningful and improved solutions.  
  **Environment:** Python 2.7, Django 1.4,Hadoop, Spark, SciPy, AWS, Pandas, Bugzilla, SVN, C++, Java, jQuery, MySQL, Linux, Eclipse, Shell Scripting, HTML5/CSS. Red hat Linux, Apache, MongoDB. Cassandra.

**Sr. Python Developer**

**Nike.**

**Portland, OR**

**April 2015 to December 2017**

**RESPONSIBILITIES**

* Involved in building database Model, APIs and Views utilizing python, in order to build an interactive web based solution and used Django Database API's to access database objects.
* Used Query and Ajax calls for transmitting JSON data objects between frontend and controllers.
* Used python based GUI components for the front-end functionality such as selection criteria.
* Created test harness to enable comprehensive testing utilizing python.
* Used Amazon Web Services (AWS) for improved efficiency of storage and fast access.
* Added support for Amazon AWS S3 and RDS to host static/media files and the database into Amazon Cloud.
* Implemented machine learning schemes using Python libraries scikit-learn and scipy.
* Involved in front end and utilized Bootstrap and Angular.js for page design.
* Use NLP, Machine Learning, Deep Learning (CNN, RNN, LSTM, Bidirectional-LSTM, Deep RNN, GAN, RL ), Computer Vision to write complex algorithms.
* Created Data tables utilizing PyQt to display customer and policy information and add, delete, update  
  customer records and PyQuery for selecting particular DOM elements when parsing HTML.
* Used Wireshark, live http headers, and Fiddler debugging proxy to debug the Flash object and help the developer create a functional component and worked on UI using HTML5, CSS3 and Java Scripts.
* Used Pandas API to put the data as time series and tabular format for east timestamp data manipulation and retrieval.
* Created Business Logic using python to create Planning and Tracking functions.
* Developed multi-threaded standalone app in python and PHP to view performance.
* Involved in development using Python, bug fixing and used Pandas library for statistical Analysis.
* Developed tools using python, Shell scripting, XML to automate some of the menial tasks.
* Working in team of Architects and Developers to build and deploy python Flask Peewee Linux AWS.
* Involved in writing stored procedures using MySQL and did version control using GITHub.
* Interfacing with supervisors, artists, systems administrators and production to ensure production deadlines are met.
* Responsible for gathering requirements, system analysis, design, development, testing and deployment.
* Developed tools using python, Shell scripting, XML to automate some of the menial tasks. Interfacing with supervisors, artists, systems administrators and production to ensure production deadlines are met.
* Developed Business Logic using python on Django Web Framework.
* Developed views and templates with python and Django's view controller and templating language to create.
* Exploring with the Spark for improving the performance and optimization of the existing algorithms in Hadoop using Spark Context, Spark-SQL, Data Frame.
* Used Click package to create the command line interface.
* Used Consul for Service Discovery and to create Key-Value pair and wrote Python scripts to parse JSON files and load the data into the Consul.
* Used Python IDE Pycharm for developing the code and performing unit test.
* Responsible for developing ETL programs to apply transformations to the staged data and load into target schema in Vertica. Utilized python, SQL, analytical functions, Unix shell to load data.
* Responsible for optimizing and reengineering some of the ETL jobs by improving SQL query performance and improving table projections in multi TB Vertica database
* Developed web-based applications using Python, Django, XML, CSS, HTML, DHTML.
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Responsible for Design and maintenance of databases using Python. Developed Python based APIs by using Flask, SQL Alchemy and PostgreSQL and created data access modules in python.
* Worked on HTML5, CSS3, JavaScript, AngularJS, Node.JS, Git, REST API, intellij IDEA.
* Development of real-time multi-tasking systems using Python.
* Designed, developed, implemented, and maintained solutions for using Git and GitHub for microservice and continuous deployment.
* Involved in Developing a Restful API'S service using Python Flask framework.  
  **Environment:** Python, Django, Shell Scripting, AWS, Pandas, Hadoop, PyQt, PyQuery, Wire shark, Flash, DOM, JSON, PHP, HTML5,  Flask,CSS3, AJAX, Cassandra, JavaScript, Angular.js, Bootstrap, Apache Web Server, MYSQL, GitHub, LINUX.

**Sr. Python Developer**

**Sanare - Miami, FL**

**June 2013 to March 2015**

**Responsibilities:**

* Developed backend modules using Python on Django Web Framework.
* Designed and developed Use- Case, Class and Object Diagrams using UML Relational Rose for Object Oriented Analysis (OOA)/Object Oriented Design techniques (OOD).
* Built the entire Hadoop platform from scratch.
* Experience in ingesting real time/near real time data using Flume, Kafka, Storm
* Designed and developed data management system using PostgreSQL. Built application logic using Python.
* Used Apache CouchDB (NoSQL) in AWS Linux instance in parallel to RDS MySQL for storing and analysis.
* Used Django API's for databases access.
* Implemented public segmentation using unsupervised machine learning algorithms by implementing k-means algorithm using Spark.
* Used AWS RestAPI gateway and connected with lambda functionality.
* Added support for Amazon AWS S3 and RDS to host static/media files and the database into Amazon Cloud.
* Knowledge in performance troubleshooting and tuning Hadoop clusters in Cloudera
* Used Amazon Web Services (AWS) for improved efficiency of storage and fast access.
* Wrote AJAX framework to transform Datasets and Data tables into HTTP-serializable JSON strings.
* Design and implementation of CI/CD pipelines using Jenkins and automated CI/CD pipelines by invoking Ansible playbooks
* Participated in the complete SDLC process and used PHP to develop website functionally.
* Used Python to extract information from XML files.
* Provided GUI using PyQt for the end client to make, change and view reports considering customer information.
* Worked on development of SQL and stored procedures on MySQL.
* Participated in requirement gathering and worked closely with the architect in designing and modelling.
* Designed and developed a horizontally scalable API's using Python Flask.
* Developed shopping cart for Library and integrated web services to access the payment(E-commerce)
* Designed Cassandra schema for the APIs.  
  **Environment:** Python, AWS, Linux, JavaScript, Hadoop  ,Django Framework, SQL, MySQL, LAMP, jQuery, Node.js Apache web server, Scala, Spark Flask, Cassandra Bash shell scripting,

**Python Developer**

**GE Energy - Waukesha, WI**

**July 2011 to April 2013**

**Responsibilities:**

* Analyze the business requirements and prepare the technical design.
* Implemented business logic in python to prevent, detect and claim the duplicate payments.
* Re-Engineered various modules for implementing changes and created efficient systems.
* Developed frontend and backend modules using Python on Django web framework.
* Made Django web based applications for financial planning calculations.
* Used Django configuration to manage URLs and application parameters.
* Build all database mapping classes using Django models.
* Developed tools using Python, Shell scripting, XML to automate some of the menial tasks.
* Resolving technical issues faced during the development.
* Worked with JSON based REST Web services and Amazon Web Services
* Used Jenkins to deploy Django application and run unit tests.
* Designed and developed the UI of the website using HTML, AJAX, and CSS
* Refactored and extended large existing Django/Python code base by maintaining PEP-8 code standards and fix the bugs.
* Experienced in administering and maintaining medium enterprise database servers on Linux servers.
* Participating in daily meetings to discuss about the new database design, modeling and creation.
* Installing and Configuring PostgreSQL from source or packages on Linux machines.
* Experience designing database structures, indexes, views, partitioning.
* Implementing backup and recovery (Logical and Online) . Setup and maintenance of postgres master-slave clusters utilizing streaming replication
* Cross-datacenter disaster recovery and backup architecture. Performing schema management, database sizing, maintaining privileges. Data migration while upgrading database versions.
* Extensive experience with Warm Standby (PostgreSQL 8.x and earlier), and Hot Standby (PostgreSQL 9.x and greater)
* Mentoring about J2EE and Python Design patterns, object oriented programming languages and bash shell scripting for coworker
* Performance monitoring and optimization. Installing and configuring Object level replication like Slony etc.
* Installing and configuring connection pooling tools like Pgbouncer and pgpool etc.
* Installing and monitoring PostgreSQL database using the standard monitoring tools like Nagios etc.
* Handled all the client side validation using JavaScript.
* Used Agile Methodology and SCRUM Process.
* Used GIT for the version control.

**Environment:** Python, Django, AWS, Bash shell scripting, Pandas, Numpy, Scipy, Jenkins, XML, JavaScript, GitHub, AGILE, SCRUM Windows, Sublime(IDE), PostgreSQL, HTML/CSS, AJAX, Bottle, Shell Scripting and Bootstrap.