**Nicholas Springer**

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**SUMMARY**

* 5+ years of experience in developing web based applications, software development and design using Python, Django, flask.
* Good experience of software development in Python (libraries used: Beautiful Soup, NumPY, SciPY,

MatPlotLib, Python-twitter, Pandas, MySQL DB for database connectivity).

* Experience with Object Oriented Programming (OOP) concepts using Python, Django.
* Proficient in SQL databases MS SQL, MySQL, Oracle and NoSQL databases MongoDB.
* Experience working with AWS and Azure cloud services.
* Extensive experience in using Python to code and design various phases for data processing pipeline.
* Hands on experience with deployment tools like Jenkins, TFS.
* Followed Agile Methodologies (Scrum) involved in daily stand-up meetings.
* Worked in SDLC, Test driven development (TDD), Behavior Driven Development (BDD) and Agile/Scrum Methodologies.
* Experience in analyzing and handling large database using Oracle Relational Data Architecture.
* Very strong full life cycle application development experience.
* Skilled in debugging/troubleshooting issues in complex applications
* Hands on experience with bug tracking tools JIRA, VersionOne, TFS and Bugzilla

**Technical Skills:**

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| **Operating Systems** | Linux, Windows |
| **Programming Languages** | Python, PL/SQL, AngularJS, JAVA |
| **Databases** | Oracle 10/11g, MySQL, SQL Server and PostgreSQL |
| **Tools** | Intellij, PyCharm, FileZilla, Git, SVN, Jenkins and Web Builder, JIRA, and VersionOne |
| **Cloud** | VPC creation, EC2 instance, S3 buckets, RDS instances, Amazon command line, cloudFront, managing S3 object lifecycle, creating CDN, implementing S3 security & Encryption, Route53, working with databases and DNS, Using bootstrap scripts |

**Professional Experience:**

**ExxonMobil, Houston-TX Jan 2019 to Present**

**Software Engineer- Python Developer**

**Description:** The project is to develop a flask/python application to fetch the normalized calculated data from hbase database and display it on frontend.

**Responsibilities:**

* Followed all agile principles for development of the application in team.
* Implemented a flask rest API using thrift server to fetch the data from hbase
* Implemented hbase pagination to enhance performance of overall application to fetch data.
* Implemented data range on rowkey to fetch data from hbase.
* Configured EFK on openshift to drain all log generated by application to kibana.
* Defined log pattern to store log on disk and pushed it on to kibana using fluentd using grok pattern.
* Implemented search engine on top of data store in hbase, help fetching matched patterns.
* Implemented unittest/integration test cases for various end points in application.
* Used Anaconda for package management and for following best practices.
* Used sphinx to document python code.
* Used converage.py to check the code coverage.
* Used code formator such as YAPF/PEP8 to format the code to maintain consistent format throughout the code.
* Used Microsoft TFS to track the development work, by creating PBI’s and bugs.
* Configured CI/CD process on microsoft TFS.

**Environment:** Python 2.7, PyCharm, TFS, Flask, Hbase, Kibana, JSON, Anaconda, Sphinx

**ReTrans, Memphis, TN Jul 2018 to Dec 2018**

**Software Engineer- Python Developer**

**Description:** The project is to add new functionalities in a TMS (transport management system) application and integrated it with different applications with in the firm.

**Responsibilities:**

* Designed and developed frontend and backend of the web application using Django and Python.
* Designed & developed templates using Django’s template library and utilized them using Django’s forms library.
* Developed different dashboards using Django, HTML, Javascript and CSS
* Implemented different business rules using Python and Django.
* Used different python libraries to generate XML files.
* Written Python scripts to parse JSON documents and load the data in database.
* Used python library such as PDFkit to convert xml to pdf format.
* Involved in capturing the requirements for serial functional interface and other software requirements specification document.
* Used version control systems such as Git and Apache SVN for maintaining a consistent state throughout the application development process

**Environment:** Python 2.7, PyCharm, GITLab, Django 1.10, HTML, Javascript, MySQL, JSON

**Microsoft, Redmond, WA Jan 2018 to June 2018**

**Software Engineer- Python Developer**

**Description:** Worked on a package of Azure Machine Learning Workbench that is forecasting package. The **Azure Machine Learning Package for Forecasting** (AMLPF) is a python package for creating end-to-end forecasting pipelines integrated with Azure Machine Learning.

**Responsibilities:**

* Participated in the complete SDLC process.
* Worked on various development task using numpy, scikit, pandas, matplotlib etc.
* **Programmed** a utility in python that used multiple packages (numpy, scipy, pandas)
* Extensively worked on TimeSeriesDataFrame for analyzing the seasonality data.
* Understanding the threading linmitation of python, utilized Joblib for parallel processing.
* Worked on migrating from pandas 0.20.3 to 0.22.0.
* Great hands on experience with PySpark for using Spark libiries by using python scripting for data analysis.
* Followed best coding practices by using Sphinx for documentation and abided by PEP8 using Pylint.
* As part of deployment process automation, wrote shell scripts, created docker images and configured the build.
* Developed a web application using Django, which displays different jupyter notebooks.

**Environment:** Python 3.5.2, Intellij, Visual Studios, ScikitLearn, Pandas 0.20.3/0.22.0, Numpy, Scipy, PySpark, Jupyter, Dockers, Anaconda, Matplotlib, GIT, VSTS.

**BNSF Railways, Fort Worth, TX Nov 2015 to Dec2017**

**Python Developer**

**Description:** The project is to build the self-service business search engine for the next generation data management so that it can be used for wide variety of cross-platforms within the organization.

**Responsibilities:**

* Practiced Agile methodology.
* Participated in requirement gathering and worked closely with the architect in designing and modeling.
* Effectively communicated with the external vendors to resolve queries.
* Developed entire frontend and backend modules using Python on Django Web Framework.
* Designed and developed Use-Case, Class and Object Diagrams using UML for Object Oriented Analysis/Object Oriented Design techniques.
* Designed and developed data management system using MySQL. Built application logic using Python 2.6.
* Used Django APIs for database access.
* Developed Restful MicroServices using Flask and deployed on AWS servers using EC2.
* Provided GUI utilizing PyQt for the end user to create, modify and view reports based on client data.
* Used Python to extract information from XML files.
* Used SPARK for large scale data analysis.
* Dealt with data ambiguity and performed lazy evaluation in PySpark for code optimization.
* Expertise in Service Oriented Architecture (SOA) and its related technologies like Web Services, WSDLs, SOAP1.1, XML, XSD, XSLT etc.
* Worked on development of SQL and stored procedures on MYSQL.
* Designed and developed a horizontally scalable APIs using Python Flask.
* Worked on Microservices for Continuous Delivery environment using Dockers and Jenkins.
* Worked on a POC on Cassandra, for storing non-relational data.
* Used Jenkins for build/deployment.
* Implemented monitoring and established best practices around using elastic search.
* Used GIT for the version control.

**Environment:** Python 2.6/2.7, Vendavo, JavaScript, Django Framework 1.3, CSS, SQL, MySQL, JQuery, Adobe Dreamweaver, Apache web serve, Jenkins, Spark.

**Baxter Healthcare, Roundlake, IL Jan 2014 to Oct 2015**

**Python Developer**

**Description:** Baxter Healthcare develops, manufactures, and markets healthcare equipment and instruments and provides services to clients. Open Data Portals are also a part of Baxter Healthcare open data initiative. There is a portal for each dataset. The portal displays the data for the Key indicators of the data set and provides the data for specific countries, regions and global. The users can make selections from various dropdowns. The portals also provide information on the latest policies, plans etc.

**Responsibilities:**

* Responsible for analyzing various cross-functional, multi-platform applications systems enforcing Python best practices and provide guidance in making long term architectural design decisions.
* Coded model level validation using Python programming with emphasis in web security.
* Handled Business logics by backend Python programming to achieve optimal results.
* Implemented jQuery to improve the overall usability of the website interface and AJAX functionality to speed up web application.
* Developed views and templates in Django to create a user-friendly website interface.
* Configured Django to manage URLs and application parameters.
* Used Django APIs for database access.
* Designed RabbitMQ/MongoDB pipeline for routing/storing of email bounce handling records.
* Implemented AJAX to update necessary section of webpages and hence, avoiding the need for reloading the entire web page.
* Creating and configuring virtual development environments with Chef and Virtual Box.
* Wrote unit test cases .
* Used GIT as Source control repositories with regular code reviews and pull/merge requests.

**Environment:** Python 2.7, Django 1.7, CSS, HTML, Bootstrap, JavaScript, AJAX, JQuery, Pandas, MYSQL, Restful API's, Linux, Servlets, JavaBeans, SCRUM, Agile, Heroku, JIRA, GIT