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➤ **Career Objective**

To seek rewarding career opportunities in Software Research and Development to render purposeful, result oriented service to the organization.

➤ **Profile Summary:**

- 7.5+ years of Total Experience in Development and Automation
- 3+ Years in Leading Teams, Scrum Master and Management
- Open source **Contributor** in **Python Software Foundation**
- Basic Research and Development, Proof of Concepts
- Gathering information from Clients directly and Reporting
- **Agile Methodology** Expert, Certified **Scrum Master**
- Corporate Trainer for Python
- Estimation and Documentation (Product Wiki.)
- Conducting Interviews for Python, Linux, C++
- **Domain Exposure:** Banking, Digital, Network Security, Energy, CFD, HPSA, Server Automation

➤ **Educational Qualification**

Degree	Year	Inst./Board/Univ.	Major Subject/Stream
M.Tech.	2011	DIAT/DRDO, Pune (D.U.)	Modelling & Simulation
B.E.	2008	NIIST, Bhopal (R.G.P.V.)	Computer Science

➤ **Present Company: Rakuten Inc.**

Designation: Technical Lead

Responsibilities:

- Doing Research and POC for new features in Product
- Sprint Planning and Agile Process Implementation
- Designing and Developing Solutions and API's
- DevOps Integration and Deployment of product
- Cost Estimations of Services (AWS Lambda, AWS API Gateway etc.)

➤ **Feather in Career**

- **Given Talk as Speaker in, International Conference in Python (PyCon 2016, New Delhi, JNU Convention Centre)**
- Topped in Final Semester of **M.Tech.** With **88.8%** in DIAT DRDO Pune, with **Best Project** Dissertation.

➤ **Certification**

- **Certified ScrumMaster® (CSM)**
- **Certified ITIL® Service Management Foundation**
- Certified Information Security Expert (CISE) Level-1
- **DELFI A1**, International Certification in **French** language

➤ **Computer Proficiency/Skill Set**

- **Programming Languages** : Python, C, C++, JAVA and Unix Shell Script
- **Operating Systems** : Mac, UNIX, Windows, Linux,
- **Database Systems** : Oracle, Microsoft Access, MySQL
- **Framework** : Flask, Quartz, Selenium, Django
- **Web Technologies** : AWS, Lambda, API Gateway, JSP, Servlets, JavaBeans, JavaScript, HTML, CSS and XML
- **Network Security** : Metasploit, Snort, NetStumbler, TcpDump, NMap, Ethereal, NetTools, KFSensor
- **Simulation Environment** : MATLAB, NS-2, GLoMoSim, QUALNET, Mathematica, ExtendSim, OpenFOAM, EnergyPlus, R
- **Agile Tools** : JIRA, Rally, HP ALM, Code /
- **Others** : Confluence, Slack, LATEX

➤ **Project management Skills**

- **Requirement Analysis & Cost Estimation:** Gathering Information from Clients, Preparing Work breakdown structure
- **Planning:** Design strategies for Project Development, Setting Up Milestones, Work Distribution Resources
- **Project Version Control:** Git, SVN

➤ **Project Details**

1. **Log Management (DevOps-System):**

This project is developed for logging, monitoring and alerting Various Applications and providing Dashboards on the information and statistics collected using those logs. Its build using AWS along with multiple **Provisioning** and **Orchestration** Tools, by creating a Graylog Cluster with Elasticsearch and Mongo Db nodes.

Team Size : 5
Role : Technical Lead

Operating System : Mac OS, Ubuntu 16.0
Scripting Language : Python
Tools Used : Graylog, Stackstorm, Puppet, LibCloud, Docker, Nagios
Web server : Amazon Web Services (AWS), EC2, ELB, VPN
Database : Mongo DB
Organization : Rakuten

2. **ImageOrigin (Web Application-API):**

This project is developed to serve multiple Image / Video Companies like Viki, Wauki, Showtime, its a web application which provides APIs for performing transformation on images like resizing, cropping, styling etc., Its build using Serverless Architecture using AWS. Also,worked onsite at Singapore Location for Integration of product with Viki.

Team Size : 5
Role : Technical Lead
Operating System : Mac OS
Scripting Language : Python
Framework : Flask, Knockout JS, Material Design, Docker
Web server : Amazon Web Services (AWS), Lambda, API Gateway
Database : Dynamo DB
Organization : Rakuten

3. **QzTest UI: (Automation Tool):**

This project is developed for our client Bank of America. Qztest is UI Based automation tool for Test Scripts to automate more than 100 banking applications, completely written in Python and Quartz Framework

Team Size : 15
Role : Lead Developer
Operating System : Windows 7
Scripting Language : Python
Framework : Quartz, Robot Framework
Database : Sandra
Organization : Accenture

4. **NextGen: Solar (Web Extension On HP SA):**

This project is developed for our client HP Houston. We developed Web Extensions for HP Server Automation Product known as **SOLutions Automated Rack build**. In this we have user interface which provides real time data of Servers Managed by **HPSA**, which includes (Server Health Monitoring, Mesh Monitoring etc.)

Team Size : 7
Role : Lead Developer
Operating System : Linux, UNIX, Windows 7, Vmware ESX
Scripting Language : Python, C++, JSON, XML, CGI, Shell Scripting, HTML, CSS, AJAX, JavaScript, jQuery PHP
Module : WebExtension "Vesta"
Web server : Apache
Organization : Mphasis

5. **HP Server Automation (Onsite HP Location):**

HP Server Automation (**HPSA**), a core product offering within the Cloud Automation portfolio, provides lifecycle management for enterprise servers and is part of HP Software's Data Center Automation Center.

HP Server Automation offers a complete lifecycle management solution for servers, allowing clients to standardize, consolidate and automate server operations in their Hybrid Data Center.

Team Size : 20
Role : Sr. Consultant
Operating System : IBM-AIX, HP-UX, SUSE, RHEL
Scripting Language : Python, Shell Scripting, XML
Module : Security & Compliances (Developing content for Audit & Remediation for various policies)
Benchmarks Policies : DISA, CIS, SOX
Organization : Mphasis

6. **IBO Administration Firewall:**

This project is developed for European client from Norway, In this we need to installs, configure a simple, customized Linux-based router/firewall, based on open-source code and develop web based GUI.

Using Linux packages like netfilter, iptables etc, routing, firewall, and NAT must be enabled.

Team Size : 1
Role : Sr. Programmer Analyst
Operating System : Debian
Scripting Language : Python, C++, HTML, CSS, CGI, shell scripting
Web server : Apache
Organization : Hi-tech Outsourcing Services

7. **Research on Green IT /Energy Modelling Softwares:**

This is research project its objective is to analyze Green IT technology and Energy modelling softwares which are developed in python and gain knowledge of market from Energy Consultants and web contacts.

Also write report and document the prospects of this technology (Reference: www.energyswift.com).

Team Size : 1
Role : Researcher/ Sr. Programmer Analyst
Research Area : Green technologies to implement and how to gain knowledge for its software Implementation
Responsibility : To Plan and implement strategy for Green IT development
Organization : Hi-tech Outsourcing Services

8. EnergyMetrics (Energy Saving Simulators):

This project is developed for our US client, it is an integrated tool for Generating Energy Analysis Reports after processing Building Models through **Energy Analysis, HVAC, CFD, and Lighting**. We work on development of Add-ons by customizing Open Design Studio (ODS) in Blender and various open sources to work in synchronization with added functionalities as per client requirement.

It provides solutions for Energy Modelling as follow (www.energyswift.com):

- Simulation & Modelling using various open source tools
 - Report Generation
 - Graphical Visualization
- Team Size** : 1
Role : Sr. Programmer Analyst
Operating System : Windows 7, Ubuntu 12.04
Scripting Language : Python, C++
Third party Tool : Blender, OpenFOAM, EnergyPlus, OpenStudio, ODS, Paraview
Organization : Hi-tech Outsourcing Services
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9. Automation Script Development:

This project is mainly developed for France Client. In this we develop automation scripts for testing of a web application which is a social networking site in python using selenium API's and unit test modules. These scripts are developed based on various types of Test Cases for different activities on that website and it includes GUI Testing as well.

Key Features as follows:

- Unit testing
 - Automated regression testing
 - Cross-browser web application testing
- For e.g.: Test cases for: Dashboards, Tabs (photo tab, video tab etc.), Downloading, Uploading, Drag Drop operations etc.

Team Size : 3
Role : Software Developer
Operating System : Windows XP/2003 Server/ 7
Scripting Language : Python, XML, Unit Test
Third party Tool : Selenium, Xpath (Firebug), SVN, VMware
Organization : Musikaar

10. Python RSS Feeder:

This project mainly provides RSS feeds to our clients about our own product SmartFoam (Simulator for CFD analysis and report, which is a customized software based on various Open Sources like OpenFoam, Paraview etc.).

Its Graphical User interface is developed on Python using Smart Traits (our own Customized product based on Open Source Traits)

Team Size : 1
Role : Developer
Operating System : Windows, Linux
Scripting Language : Python
Third party Tool : Python GUI libraries (tkinter, wxwidget), PyQt, Smart Traits
Organization : Tridiagonal Solutions Pvt. Ltd.

11. Windows Porting of OpenFOAM:

In this project "Openfoam on windows port with parallel support" I have successfully done compilation of compilers like mingw32 and then Cross compiled whole Openfoam 1.7.0 for windows 32 bit as well 64 bit with customized code.

Then Develop UNIX Shell Script for Automation of this whole process end to end.

Team Size : 1
Role : Project Engineer
Operating System : Windows XP/2003 Server/ 7, OpenSuse, CentOS
Scripting Language : C++, GCC, DLL, Unix Shell scripting
Third party Tool : OpenFOAM, VTK, GIT, GDB, MPI/MPICH2, Mingw, Dependency Walker
Organization : Tridiagonal Solutions Pvt. Ltd.

12. Vulnerability Assessment:

In this project we have to develop Nasl scripts to overcome or patch the vulnerabilities present in various softwares in there various versions which are filed on Telus website by CVE ID.

In this, first we have to analyze the type of vulnerability on the basis on these symptoms, CVE ID, Bugtrac id and the platform with their effected versions and then write the Nasl script using NESSUS tool.

Team Size : 2
Role : Developer
Operating System : Windows (XP, Vista, 7, 2003, 2008 R2 itanium server) and Linux Family (RedHat, CentOS, Fedora, Ubuntu, Suse) 32/64bit
Scripting Language : Nasl
Third party Tool : Nessus, ESXi – VMware, vSphere Client
Organization : Musikaar

13. Security Issues in Wireless Network:

(Mentor: Prof. MM Kuber – Scientist 'E' DRDO, Pune India)

In this project we research and analyze the current scenario in wireless network security arena by experimenting by various setups, which includes devices (WiFi, Bluetooth, Zigbee etc) and various wireless standards like 802.11 a/b/g/n.

It includes experimental setup of Snort for wired networks and Kismet, NetStumbler for wireless networks to analyze Intrusion detection System (IDS) and Intrusion Prevention System (IPS). It includes study of Adhoc networks and its routing algorithms (AODV, DSR etc.)

Team Size : 1
Role : Junior Scientist
Operating System : Windows XP/2003 and Linux (RedHat, Fedora, Ubuntu)
Scripting Language : C, C++

Hardware : DLink Access Point, Firewalls, IDS/IPS,
Third party Tool : GloMoSim, NS2, Cygwin, Snort, NetStumbler, Kismet, TcpDump, NMap, Ethereal
Organization : DIAT, Defence Research & Development Organization (DRDO)

14. Modelling and Simulation of Network Security:

(Mentor: Dr. RN Pralhad – Scientist ‘F’ DRDO, Pune India)

Research and Development on Network Models by experimentation and validation on real time system.

- Evaluation of **Network Security Situation** (NSS) using weighted model and wavelets than **Prediction of NSS** using Grey Theory.
- **Threat Assessment** is done by Reverse Engineering using Genetic Algorithm on predicted NSS value.
- Combined Wavelet Grey theory model proposed for Network Security with Reverse engineering for the first time.

Team Size : 1
Role : Researcher, Developer & Analyst
Operating System : Windows XP/ Vista/ 7 and Linux (Ubuntu, Redhat)
Scripting Language : Matlab, Python, C++, JavaScript
Third party Tool : Matlab, QualNet, NS2, MetaSploit, Snort, NetTools, KFSensor, NMap, Ethereal, TcpDump
Organization : DIAT, Defence Research & Development Organization (DRDO)

15. Harmony (Social Networking Website)

This project is an Online Web based application developed for connecting network of friends & communities. In this we can add profile and performs various operations on it like Insertion, Updation, Deletion of Scraps, Messages and Photos etc.

Team Size : 3
Role : Developer
Operating System : Windows and Linux
Scripting Language : JAVA, MySQL
Environment : Java Run-Time Environment, **JDK 1.5**
Technology Used : **Java Server Pages (JSP), JavaBeans, JavaScript.**
Database : Oracle 8I
Web Server : **Jakarta-Tomcat-5.0.0.** (For standalone system)

16. Campus Drive (Web Application for Training Placement System of College)

This project is an Online Web based application developed for Training and Placement Cell of any college, this application helps Training Placement Officers (TPO) or by Human Resource (HR)

- Gold Plan:-Mobile Messaging
- Silver Plan :-Automatic Emailing
- Copper Plan :-Online Registration

Team Size : 4
Role : Developer
Operating System : Windows and Linux
Scripting Language : JAVA, MySQL
Environment : Java Run-Time Environment, **JDK 1.5**
Technology Used : **Java Server Pages (JSP), JavaBeans, JavaScript.**
Database : Microsoft Access
Web Server : **Jakarta-Tomcat-5.0.0.** (For standalone system)

➤ **Seminars (Delivered)**

- Intrusion Detection System
- Modelling of Data Networks
- Network Simulation
- Network Security

➤ **Workshops /Conferences (Attended)**

- Workshop on Cyber Security organized by DIAT/DRDO.
- National Conference in Modelling and Simulation (NCMS-2009)
- National Conference on Computational Engineering: Modelling, Simulation and Optimisation (CEMSO-2010)

➤ **Achievements**

- Awarded Junior Research Fellowship by DIAT DRDO, Pune in 2008.
- Selected in Top 5 all-round personality of M.P. in Global Leader Contest organized by Scratchmysoul.com
- Won Academic trophy and Sports trophy of the year for “Tilak House” as House Captain 2004 and House Vice Captain 2003 for 2 consecutive years
- Chief Coordinator in State Level Event NOVIZIO-2K8
- Won Inter College Table Tennis championship (Mixed doubles) organized by ISTE.
- Semi-finalist, Quarterfinalist and Pre-quarter finalist in National Level Technical Table Tennis Events in MANIT Bhopal, COEP Pune and PVG Pune respectively.

➤ **Co-curricular Activities**

- Public speaking/ Anchoring
- Cultural Activities
- Sports Events

➤ **Personal Profile**

- **Date of Birth** : 03/09/1986
- **Passport** : Available
- **Hobbies** : Playing Guitar and Table Tennis
- **Languages Known** : English, French, Hindi, Marathi, Gujarati

Date : 23rd Oct 2017

Place : Bangalore

[Saurabh Jaiswal]