

# Ram Prasad

## PROFESSIONAL EXPERIENCE

9  
years  
of  
experience  
in  
the  
field  
of  
information  
technology  
primarily  
around  
Python  
(Pandas,  
NumPy,  
Asyncio,  
Flask)

.  
Proficient  
at  
developing,  
optimizing,  
extract,  
manipulate,

analyze  
&  
interpret  
data  
from  
various  
data  
sources,  
developing  
analytic  
solutions  
and  
deriving  
key  
observations  
using  
Python.

Experienced  
in  
data  
querying  
languages  
(SQL  
and  
MySQL)  
,  
scripting  
languages  
(Python)  
,  
No  
SQL  
(MongoDB)

and  
machine  
learning  
libraries.

Extensive  
experience  
in  
data  
analysis  
and/or  
reporting  
along  
with  
strong  
knowledge  
of  
database  
and  
related  
technologies.

Developed  
and  
optimized  
ETL  
workflows  
in  
both  
legacy  
and  
distributed  
environments.

Worked  
on  
datasets  
related  
to  
batteries,  
telecommunication,  
energy  
and

analyzed  
large  
datasets  
using  
pandas  
and  
pyspark.

Expertise  
in  
reporting  
tools  
Tableau  
and  
Grafana.

Experience  
in  
Elasticsearch,  
Kibana,  
Logstash  
and  
Kafka.

Expertise  
in  
statistical  
methods,  
statistical  
analysis,  
data  
visualization,  
data  
mining,  
feature  
engineering

and  
model  
selection  
techniques.

Scheduling

the  
reports

Daily,  
Weekly  
and

Monthly  
basis

as  
per

the  
Client

Requirements.

Served

as

a

primary

point

of

contact

for

workbook

and

custom

Tableau

reporting

solutions

related

issues.

Experienced  
in  
directly  
interacting  
with  
clients  
in  
taking  
requirements  
and  
delivering  
projects.

Maintained  
adequate  
communication  
with  
project  
team,  
explaining  
the  
progress  
on  
the  
development  
effort.

## SKILLS

### Languages

:  
Python

## **Python**

### **Packages**

:

Pandas ,

NumPy,

Asyncio ,

Scipy,

PySpark,

SqlAlchemy ,

pymysql

### **Web**

### **Frameworks**

:

Flask,

Fast

API,

Django

### **Databases**

:

SQL,

MySQL,

PostgreSQL,

MongoDB,

DynamoDB

### **Clouds**

:

Azure,

AWS

EC2,

AWS

S3,  
AWS  
athena,  
AWS  
glue,  
GCP,  
BigQuery

## **ETL Tools**

:  
Lava  
storm

## **Visualization Tools**

:  
Tableau,  
Power  
BI,  
Grafana

## **Computer Vision**

:  
OpenCV

## **Tools**

:  
Airflow ,  
Databricks ,  
Kafka ,  
Git,  
Bit  
bucket ,  
Jira ,



gitla ,  
Sonar  
Qube

## Projects

*Python  
Developer-  
Tomgandhi  
Consulting  
Limited ,  
UK;  
(JAN  
2022  
-  
OCT  
2022)*

Project

Description :

**Offshore  
Wind  
form**  
is  
a  
cloud-  
based  
platform ,  
associated  
with  
the

the  
installation  
of  
wind  
turbines  
and  
the  
connection  
of  
power  
grids.  
It  
will  
provide  
a  
comprehensive  
set  
of  
capabilities  
for  
the  
analysis  
and  
design  
of  
wind  
turbine  
sub-  
stations ,  
mechanical  
loading,  
thermal  
resistances,  
and  
optimization  
techniques.

## Roles and Responsibilities:

Working  
with  
product  
management  
and  
technology  
teams  
to  
understand  
business  
needs  
and  
find  
possible  
solution.

Developing  
the  
new  
features,  
handling  
enhancements  
and  
fixing  
bugs.

Working  
with  
AWS  
cloud  
platform  
and  
its

re

features

**AWS**

**EC2/S3/RDS**

**/SES/DynamoDB**

based

on

Python.

Implementing

AWS

services

like

**EC2,**

Elastic

Load

balancing

(ELB)

,

**S3,**

Cloud

Front,

SNS,

RDS,

IAM

Built

application

and

database

servers

using

**AWS**

**EC2**

and

create

AMIs

as

well

as

used

RDS

for

**MySQL.**

Created

**AWS**

**S3**

buckets,

performed

folder

management

in

each

bucket,

managed

cloud

trail

logs

and

objects

within

each

bucket.

Creating

**RDS**

instances

to

serve

data

through  
servers  
for  
responding  
to  
requests.

Used

**IAM**

for  
creating  
roles,  
users,  
groups  
and  
also  
implemented

MFA

to  
provide  
additional  
security  
to

AWS

account

and

its  
resources.

Working

with  
stakeholders  
including  
the

Executive,

Product,  
Data  
and  
Design  
teams  
to  
assist  
with  
data-  
related  
technical  
issues  
and  
support  
their  
data  
infrastructure  
needs.

Responsible  
for  
analysis,  
development  
and  
integration  
of  
**APIs.**

Maintained  
and  
updated  
a  
**GraphQL**  
layer  
to

allow  
retrieval  
and  
updates  
of

user  
interactions  
with

**MySQL**  
database

Implementing

**GraphQL**

types  
and  
resolvers

to  
provide  
the

necessary  
data  
for

frontend  
development  
while

maintaining  
minimal  
calls

to  
the  
database.

Managing  
the  
schema,

tablespaces



tables/paces

and

writing

mathematical

functions

using

pandas

and

**SqlAlchemy.**

Implementing

multi-

processing,

fire

and

forget

for

the

services.

Maintained

and

updated

unit

and

integration

tests

for

both

the

**GraphQL**

and

lib

level

to

validate

validate  
behavior

Managed

**GIT**

repositories

for

branching,

merging

and

tagging.

Maintain

and

support

**API**

gateway

infrastructure

and

associated

tools.

Used

**JIRA**

tool

to

track

all

the

defects

and

changes

related

to

build.

*Python*

*Develop*

*Developer-*

*Prieto*

*Battery,*

*UK;*

*(MAR*

*2021*

*-*

*JAN*

*2022 )*

Project

Description:

**Smart  
Battery  
Management  
System  
(SBMS)**  
is  
a  
monitoring  
system  
for  
Industrial  
that  
runs  
algorithms  
to  
calculate  
the  
SoC  
(State  
of  
Charge)

,  
SoH  
(state  
of  
Health)  
and  
predicts  
the  
RUL  
(Remaining  
Useful  
Life)  
of  
batteries.

Roles  
and  
Responsibilities:

Worked  
in  
designing  
and  
deploying  
**AWS**  
solutions  
using  
**EC2,**  
**S3.**

Design  
roles  
and  
groups  
using  
AWS

identity

and

access

management

(IAM)

Implemented

serverless

architecture

using

API

gateway,

**lambda.**

Responsible

for

setting

up

databases

in

AWS

using

**RDS,**

storage

using

**S3**

**buckets.**

Created

the

flask

rest

APIs

on

**Mongo**

**DB**

s

for  
requests  
for  
web  
application.

Created  
the  
flask  
rest  
APIs

on  
**Mongo**

**DB**  
for  
requests  
for  
mobile  
application.

Worked  
on  
physics-  
based  
algorithms

to  
find

**SoC**  
(State  
of  
Charge)  
for  
batteries.

Worked  
on  
calculating

calculating

the

battery

available

energy,

available

capacity.

Preparing

the

large-

scale

synthetic

data

from

small

scale

of

data

and

used

to

push

to

the

database.

Creating

the

users

to

access

the

respective

tables

in

**Postgres.**

Pushing  
the  
synthetic  
data  
of  
calculated  
predictions  
to

**ELK**

through  
python  
script.

Pushing  
the  
synthetic  
data  
of  
calculated  
predictions  
to

target  
tables  
through  
python  
script.

Creating  
the  
indexes  
and  
data  
pushing  
to



the

**Kibana**

through

python.

Maintaining

and

creating

the

**Grafana**

visualizations

for

battery

management

data

(database)

.

Creating

live

dashboards

using

**Grafana,**

for

to

monitor

the

algorithm

predictions.

Generated

the

synthetic

data

using

random

function  
of  
NumPy.  
Managed  
large  
datasets  
using  
**Pandas**  
data  
frames  
and  
**Postgres**.

*Python*  
*Developer -*  
*Worley,*  
*Denmark;*  
*(JUN*  
*2018*  
*-*  
*FEB*  
*2021)*

Project  
Description:

**Predixio**  
is  
a  
platform  
which  
is  
holds

all  
machineries  
data  
of  
current,  
historic  
and  
running  
statuses .  
It  
gives  
the  
current  
process,  
status  
of  
machines,  
details  
of  
manufacturing  
units  
and  
workflow .

Roles  
and

Responsibilities:

Writing  
effective,  
scalable  
code.

Worked  
on  
**pyspark**  
to  
distribute  
data

processing

on

large

datasets.

Responsible

for

setting

up

databases

in

AWS

using

**RDS,**

storage

using

**S3**

**buckets.**

Integration

of

**RESTful**

**API.**

Assembling

large,

complex

sets

of

data

that

meet

non-

functional

and

functional

business  
requirements.

Built  
application  
and  
database  
servers  
using

**AWS**

**EC2**

and  
create  
AMIs

as  
well  
as

used  
RDS

for  
**MySQL.**

Writing

ETL  
scripts  
and  
code

to  
make  
sure  
the

**ETL**

process  
performs  
optimally

Handling  
data  
modeling,  
data  
warehouse  
architecture,  
**data  
pipeline**

Managed

**GIT**

repositories

for

branching,

merging

and

tagging.

Developing

back-

end

components

to

improve

responsiveness

and

performance.

Managing

data

storage

and

solutions

for

application

robustness.

Creating

logics

for

data  
processing  
and  
computations.  
Combining  
raw  
information  
from  
different  
sources.

## *Data*

### *Analyst*

-

*Telus,  
Canada;*

*(JUL  
2017*

-

*JUN  
2018)*

Project

Description:

Intelligent

Workload

Distribution

(IWD)

is

a

telecom

back -

end

service

application ,

which

reports

view

of

back -

office

activities

and

that

provides

a

wide

range

routing

all

types

of

tasks

such

as

no

of



orders ,  
complaints  
etc .

Roles  
and  
Responsibilities:

Creating  
and  
developing  
the  
reports  
using  
pandas  
(python)

.

Applying  
business  
logics  
and  
transform  
the  
data  
into  
required  
format.

Auto  
generation  
of  
reports  
as  
day,

month,

and

year

wise

using

Lava

storm.

Optimizing

different

**lava**

**storm**

graphs

and

**tableau**

reports.

Developed

Tableau

workbooks

from

multiple

data

sources

using

**Data**

**Blending.**

Developing

python

**ETL**

scripts.

Reporting

the

issues

and

resolve

the

issues

that

rise

during

the

test

process.

Writing

**SQL**

codes

in

lava

storm

nodes

to

pull

data

from

different

servers.

Automate

&

optimize

the

data

extraction

and

report

generation

process.

Loading

1

the  
processed  
data  
into  
tables  
to  
generate  
the  
reports

## *Analyst*

*(Intern)*

-  
*Skanska,*  
*Sweden;*  
*(APR*  
*2013*  
*-*  
*MAR*  
*2017)*

Project

Description:

The  
objective  
of  
the  
project  
is  
to  
develop  
a

sales  
data  
mart  
and  
develop  
reports  
focusing  
on  
different  
areas  
of  
organization.

First  
Phase  
is  
to  
develop  
an  
ETL  
application  
for  
the  
data  
mart  
and  
the  
second  
phase  
is  
to  
develop  
the  
reports  
for  
analysis.

The  
reports  
are

are  
mainly  
useful  
for  
the  
Top-  
level  
management  
for  
reviewing  
performances  
of  
plants  
and  
to  
take  
strategic  
decisions

Roles  
and  
Responsibilities:

Writing  
reusable,  
testable,  
and  
efficient  
code  
using  
python.  
Auto  
generation  
of  
reports  
as  
day,

month,  
and  
year  
wise  
using  
python.  
Creating  
Tableau  
visualizations.  
Publishing  
Workbooks  
and  
Data  
Sources  
to  
Tableau  
Development.  
Establishing  
connections  
to  
Data  
Sources.  
Adding  
or  
Creating  
Dimensions,  
Measures  
and  
Calculations.  
Performing  
Data  
Modeling  
in

Tableau  
Desktop.

Project

Description:

Resource

Placement

System

using

python

from

long

time

and

want

to

migrate

the

old

legacy

scripts

to

new/moderate

python ,

as

some

packages

are



are  
downgraded  
and  
enhancing  
scripts  
for  
application  
will  
help  
to  
streamline  
the  
process

## Roles

and

Responsibilities:

Enhancing  
the  
legacy  
python  
scripts  
to  
new  
version.  
Collaborating  
with  
the  
team  
and  
gathering

the  
requirement.

Collate/collect  
data

using

the

scripting

language

Work

with

product

management

and

technology

teams

to

understand

business

needs

and

find

possible

solution .

Issues

with

tracking

the

data

changes.

Errors

in

workflow

management.

Workload

Worked

closely

with

developers

and

business

teams

in

resolution

of

technical

resolutions.

Implemented

the

automation

scripts

using

python.

Debugging

and

maintenance

of

automation

scripts.

## QUALIFICATIONS

Bachelor

of

Technology

in

Electronics

&

Communication

Engineering

Jawaharlal

Nehru

Technological

Technological  
University,  
Hyderabad,  
India