# Rajeshkumar Karra

#### **SUMMARY**

Having 2 years of experience from Stemhub Technologies Private Limited in various avenues of Machine Learning and Web development using Django and PyTorch. Ability to develop suitable Product Codes and Algorithms. Proactive with a problem-solving attitude.

#### Willing to relocate: Anywhere

- Having hands-on experience in developing Web based Applications and implementing Object Oriented Programming (OOPS) with Python and Django and Machine Learning with knowledge based projects from Kaggle.com and Jovian.ai using Python, sklearn, pandas and Matplotlib.
- Good knowledge in Scikit-Learn, NumPY, SciPy, Pandas, NLP, MatplotLib, Statsmodels and Jupyter Notebook, Statistical Analysis, Linear/Logistic Regression, Clustering, Graph Theory, Regularisations, Data Cleaning and Experienced use of modern source control (GIT) to develop a machine learning projects.
- Reliable experience in application development using Django, Python and Django ORM.
- Good understanding of client side designing and validation using HTML,
   CSS and JavaScript.
- Good knowledge in developing Python web based applications using Django
   Framework.
- Good knowledge in **SQL database** and **PostgreSQL**.
- Good knowledge in maintaining various version controls systems such as
   GIT, Github and GitLab
- Experience in working with AWS(Amazon Web Services) cloud platform.
- Experience in working with various Python integrated Development Environments like Google Cloud Shell, Google Colab, IDLE, VSCode, PyCharm, Atom, Eclipse, Sublime Text.
- Good knowledge with Requests, NumPy, Matplotlib and Pandas libraries during the development lifecycle.
- Proficient knowledge with Deploying on Heroku cloud platform
- Proficient with UNIX/Linux internals, basic cryptography & security.
- Strongly follow PEP-8 coding standards and test a program by running it across test cases to ensure validity and effectiveness of code using PyChecker and PyLint.
- Displayed and proved capability to learn any new technology and work on it.
- Hands-on knowledge in writing and reviewing requirements, architecture documents, test plans, design and maintaining documents, quality analysis and helping with the software release process
- Ability to successfully multitask and prioritize work.

### **TECHNICAL SKILLS**

#### Languages & Packages:

Proficient in:	Python, Django, PostgreSQL, AWS, Linux, Scikit-Learn, NumPY, SciPy, Pandas, NLP,
	MatplotLib, Statsmodels and Jupyter Notebook

#### Statistics/Machine Learning:

Statistical Analysis, Linear/Logistic Regression, Clustering, Graph Theory, Regularisations, Data Cleaning and Experienced use of modern source control (GIT).

#### <u>Servers:</u>

Application Server:	Django
Web Server:	Heroku, GCP and AWS
Web Technologies:	HTML, CSS, JS

#### Framework:

Proficient in:	Django 3.1.4, PyTorch, Fastai
ORM Framework	Django ORM
RDBMS:	MySQL, PostgreSQL

#### <u>Tools:</u>

Version Control Tools:	GIT
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#### Operating Systems:

Proficient in:	Linux(all Distros), Unix, ChromeOS and Windows(all)
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## **EXPERIENCE/PROJECTS DONE**

# **Machine Learning Developer**

Project#1 (Current)

Project Title: Deep Learning with PyTorch: Zero to GANs - Jovian

client : Jovian (Knowledge based project)

Role : Programmer

Environment : PyTorch, Python, Pandas, Matplotlib, sklearn

**Description**: "Deep Learning with PyTorch: Zero to GANs" is a

beginner-friendly online course offering a practical and coding-focused

introduction to deep learning using the PyTorch framework.

#### Responsibilities:

• PyTorch and Gradient Descent:

- Working with Images and Logistic Regression:
- Train the Model:
- Training Deep Neural Networks on GPU:
- Image Classification with Convolutional Neural Networks:
- Data Augmentation, Regularization & ResNets

#### Project#2

Project Title: <u>Titanic: Machine Learning from Disaster - Kaggle</u>

client : kaggle (Knowledge based project)

Role : Programmer

**Environment**: Python, Pandas, Matplotlib, sklearn

Description : Use Machine Learning to create a model that predicts which

passengers survived the Titanic shipwreck.

#### Responsibilities:

• Load and understand the data.

- Building models.
- Measure the performance of the model, test and compare alternatives.
- Fine-tune the model for better performance.
- Using a more sophisticated machine learning algorithm.
- Used Kaggle kernels or Google Colab.

#### Project#3

Project Title: Housing Prices Competition - Kaggle <sup>2</sup>

client : Kaggle (Knowledge based project)

Role : Programmer

Environment : Python, Pandas, Matplotlib, sklearn

Description : Use Machine Learning to create a model that predicts which sales

price for each house

#### Responsibilities:

- Advanced regression techniques like random forest and gradient boosting
- Load and understand the data.
- Building models.
- Measure the performance of the model, test and compare alternatives.
- Fine-tune the model for better performance.
- Build a Random Forest model and train it.
- Make predictions.
- Dealing with Missing Values
- Dealing with Categorical Variables.
- Dealing Deploying(and even testing) complex models with pre-processing using Pipelines.
- Test the models with Cross-Validation.

<sup>&</sup>lt;sup>1</sup> "Kaggle." <u>Titanic: Machine Learning from Disaster</u>. Accessed 7 Nov. 2020.

<sup>&</sup>lt;sup>2</sup> "Kaggle." <u>Housing Prices Competition</u>. Accessed 7 Nov. 2020.

## **Python Developer**

#### Project#1

Project : Responsive Web Application

Client : Stemhub Technologies Private Limited

**Role** : Programmer

Team Size : 2

Environment : Django3, Django ORM, SQLite, Bootstrap

**Description**: Stemhub & rajeshkumarkarra's portfolio are startups to show themselves in an aspect of services and portfolio and getting requests from clients through forms, for this we've used Jinja technique and for the contact page we have used Django models to access the admin page for any manipulations and also integrated PayPal API as the payment gateway.

Yuvathirang <sup>4</sup> was started as a non-profit organization and organized by APJ Abdul kalam centre. The primary objective of this project is to provide and organize some library facilities to the Government schools located in remote areas, So we have developed access to the admin panel to manipulate the data for their projects with Bootstrap and Django Jinja technique and implemented forms and validation.

#### Responsibilities:

- Understanding the functionality by analyzing the document/requirement.
- Involved in the Analysis, Design, Coding, modification and implementation of user requirements in the application.
- Implemented forms and validation.
- Used Django ORM to integrate Django Framework with ORM.
- Involved in front-end designing using HTML, CSS, JavaScript, and Bootstrap.
- Responsible for debugging and troubleshooting the web application.
- Coding, testing and deploying the web application using Heroku

#### **EDUCATION**

Ideal Degree College, Hyderabad - B.Com
2014,HYD

#### CFRTIFICATES AND LICENCES:

Introduction to Machine Learning | Kaggle | Aug 2020
Pandas | Kaggle | Aug 2020
Python | Kaggle | Aug 2020
Data Visualization | Kaggle | Aug 2020
Micro Challenges | Kaggle | Aug 2020
Data Cleaning | Kaggle | Aug 2020

<sup>&</sup>lt;sup>3</sup> "StemHub · GitHub." <a href="https://github.com/stemhubtechnologies">https://github.com/stemhubtechnologies</a>. Accessed 29 Dec. 2020.

<sup>&</sup>lt;sup>4</sup> "StemHub · GitHub." <a href="https://github.com/yuvathirang">https://github.com/yuvathirang</a>. Accessed 29 Dec. 2020.

# ADDITIONAL INFORMATION:

Languages: English, German(A2)