**P.VAMSI**

**Mobile: +91-9100932496 EMail:vamsi.peddireddy26@gmail.com**

**Patent: 201711022439/** **P2234-US**

**Professional Summary:**

* Having 4 years of professional work experience in Machine Learning, Device Analytics, Deep learning, embedded systems and Application development.
* Develop high –performance machine learning systems for detecting abnormality, intrusions, fraud and malware.
* Lead the full machine learning system implementation process : Generating training data ,model design, feature selection ,system implementation and evaluation and Efficiently implement algorithms and run experiments on real data
* Experience working on distributed computing platforms such as those based on Apache Hadoop and cloud services like Amazon’s EC2 makes it easier and cost-effective
* Experience in developing applications using Machine Learning Algorithms using SPARK framework
* Understanding of probability, statistics, algorithm development and the common libraries/packages/APIs used in this field ( scikit-learn, Theano, Spark MLlib, etc)
* Research and develop machine learning models for fraud detection in the industry areas
* patent on **System** **and method for tuning and deploying analytic models over target eco system(India/US)**
* Good Experience of following Modules: Strong Programming skills in Python, C and SPARK
* Work with Data scientists and product managers to frame a problem and Work closely with development team to ensure accurate integration of machine learning models into firm platform
* Good Understanding of Distributed Programming Possessing Good Knowledge on Deploy validated algorithms on **cloud**, **embedded systems** and **edge devices**.
* Handling tasks of developing, debugging, and integrating embedded software to meet the requirements.
* Good Experience on Source Code Version Control Tools like GIT, SVN

**Academic Profile:**

B.TECH (ECE) from JNT University, Anantapur, AP.

**Technical Skill set:**

**Programming Languages :** C, Python, Scala

**SOC :** Nvidia jetson TK1, IntelEdision

**OS :** Windows, Linux, Android

**Protocols :** I2C

**Frameworks :** Spark

**Version Control :** GIT, SVN

**DeepLearning :** SNN, CNN, RNN

**Software Tools :** GNU tool chain, Android SDK, Eclipse IDE

Employment Summary:

* Currently working as a Lead Engineer for HCL, Hyderabad from Sep 2014 - Till Date

Trainings:

* Participated in training on big data Analytics program at **INSOFE.** Hyderabad
* Participated in training on Advanced Data science program provided by Andrew ng**.**

**Project Details:**

**Project #1:**

**Title : Yanmar marine engine analysis**

Role : Lead Engineer

Hardware Platform : x86

Development Tools : Anaconda, jupytor notebook

Platform : Linux.

**Description:**

Project aims to predict the engine failures before docking. The process includes understanding the data and find out what are all caused parameters for the damage and send an acknowledge to the customer before damage so that they will do require maintains.

**Roles &Responsibilities:**

* Understanding and analysing the Yammer engine data
* Run through varies data pre-processing steps
* Create histogram analysis for various parameters to identify the change in behaviour over a period
* Building the Random forest model.

**Project #2:**

**Title : Device Analytics**

Role : Lead Engineer

Hardware Platform : Nvidia jetson tx1, Intel Edison

Development Tools : kernel 3.5.X, Arm GCC Cross Compiler.

Platform : Linux.

**Description:**

Project aims to run predictive analytics models on embedded board. The process includes compiling the required model binaries, porting them into the board and building the models on embedded board.

**Roles &Responsibilities:**

* Understanding and analysing the machine Learning models
* Cross Compiling model libraries for embedded board to run analytic models on devices
* Porting the compiled binaries onto embedded board
* Understand the pmml standards
* Build pmml predict engine to score on deployment
* Building the analytic models.

**Project #3:**

**Title : Pangea (Distributed Analytical Work bench)**

Role : Member Technical staff

Databases Used : HDFS

Development Tools : Spark, Scala, Python, Aws

**Description:**

Pangea is an advanced analytics platform that generates insights from Big Data by leveraging advanced machine learning algorithms.

**Roles &Responsibilities:**

* Handle the tasks of developing and integrating ML models.
* Understood the Spark framework and develop ML models using mlib.
* Written Supervised and unsupervised models using spark mlib
* Written Deep learning models
* Create pmml’s for machine learning models
* Deployed all models in AWS
* Resolving bugs

**Project #4:**

**Title : Conditional monitoring**

Role : Member technical staff

Hardware Specification : Intel Edison, Intel Galileo

Development Tools : ADB, kernel 3.10.X, Arm GCC Cross Compiler

**Description**:

* **Smart tracker**: Smart Tracker is an intelligent analytics device, runs the embedded analytics on the biometric pattern (Heart Rate Pattern) for user authentication and captures the geo-location details and continuously monitors the path traversal and indicating deviations if any found.
* **Malware detection**: This is an advanced technique that analyses power consumption patterns to detect the anomalies in a device
* **Embedded Power Optimization using dynamic pattern analysis and data analytics**: Smart power optimization technique which suggests optimization based on the analysis of power consumption data.

**Roles &Responsibilities:**

* Hardware design for the tapping and capture of the input power taken by embedded device
* Design, Implementation of the identification code for the maximum power consumption code.
* Data analysis for the power consumption pattern on an embedded device
* Design and implementation of software part for to identify the malware or any unwanted program.
* Design & implementation of malware detection mechanism
* Design and implementation of heart rate authentication at both software and hardware level.
* Responsible for the complete heart rate authentication algorithm.
* Learn How to build u-boot and kernel images for a specific target

(PEDDIREDDY VAMSI)