BACHELOR OF SCIENCE HONORS DEGREE IN SOFTWARE ENGINEERING

FINAL YEAR RESEARCH PROJECT PROGRESS REPORT

FACULTY OF SCIENCE

UNIVERSITY OF KELANIYA

Bi-Weekly research progress report submitted by the student

Student No: SE/2015/025
Student name: M.S.Prasad
Name of the research project: Cloud Service Selection Using Machine Learning
Name of the research supervisor: DR. LANKESHWARA MUNASINGHE
Report No.: 02
Period covered (from ~ to dates): 2020/11/09 – 2020/11/23

Instructions:

- Bi-weekly report should be completed in every two weeks and must submit to the research supervisor no later than 11:59 pm on the Friday of the second week in review.
- Provide descriptive answers for each of the progress review questions. You may spend 100 ~ 150 words for your answer (it must contain at least 50 words).
- You are strongly advised to contact your supervisor in every two weeks. In your report, you are required to state how you addressed the supervisor's comments for the previous report.

(1) State the overall research progress (from start to UpToDate).

After submitting the progress report, I compare accuracy of ml learning algorithms to predict best result. According to result, I can get best accuracy from Radial Basis Kernel type of SVM kernels.

Model Type	Accuracy
Accuracy Linear Kernel	0.6804715065738898
Accuracy Radial Basis Kernel	0.8480416313496678
Accuracy Poly Basis Kernel	0.8475094123908459
Accuracy Sig Basis Kernel:	0.29380457708304586

But I cannot acceptable this accuracy for my training model. This is only good machine learning algorithm use for this prediction system. So, I thought learning about neural network to get better result.

(2) What were the supervisor's comments on the previous report and how did you address them?

According to given comments, I sent my high-level architecture plan to supervisor.

(3) State the progress of your research compared to the previous two weeks period.

Previously, I did preprocess part for dataset and write a model for getting predictions. But, because of reducing accuracy of model, I learn about neural network. So, I follow a course in Coursera and follow lecture of Machine learning. Then, I can get better idea about neural network. And I prepare dataset for pricing prediction model for this week. Then, I found feature variables what we can get and apply multiple linear regression model.

(4) What is your plan for next two weeks?

I plan to compare accuracy of ml learning algorithms to predict best result. And I hope to start my neural network model. As well as I hope to test both machine learning prediction models apply to neural network model, because, identify ml prediction pattern was huge task, specially for selecting Instance type of EC2.

(5) Any other matters related to your research.

I want to find dataset for Azure and GCP.