

Forecasting Monthly Ad Revenue from Blogs using Machine Learning

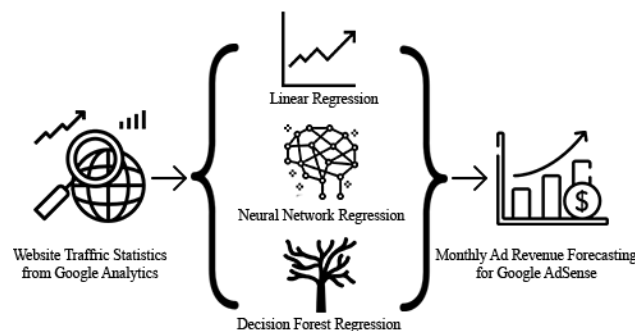
D. S. Dias^{a,1}, N. G. J. Dias^b

^a*Department of Computer Science, University of Sri Jayewardenepura, Gangodawila, Sri Lanka*

^b*Department of Computer Systems Engineering, University of Kelaniya, Dalugama, Sri Lanka*

Blogs emerged in the late 1990s as a technology that allows Internet users to share information. Since then, blogging has evolved to become a source of living to some and a hobby to others. A blog with rich content and regular traffic could easily be monetized through a number of methods. Affiliate marketing, Google AdSense, offering courses or services, selling eBooks and paid banner advertisements are some of the methods in which a blog could be monetized. There exists, a direct relationship on the revenue that can be generated through any of the above methods and the traffic that the blog gets. Google AdSense is the leader in providing ads from publishers to website owners. All bloggers or blogging website owners who have monetized their blogs, attempt to maximize their revenue by publishing articles in hope that it will generate the targeted revenue. On the other hand, bloggers or blogging website owners that hope to monetize their blog will be greatly benefitted if there was a way to forecast the monthly ad revenue that could be generated through the blog. But there exists no tool in the market that can help the bloggers forecast their ad revenue from the blog. In this research, we are looking at the possibility of finding an appropriate machine learning technique by comparing a linear regression, neural network regression and decision forest regression approaches in order to forecast the monthly ad revenue that a blog can generate to a greater accuracy, using statistics from Google Analytics and Google AdSense. As conclusion, the Decision Forest Regression model came out as the best fit with an accuracy of over 70%.

Keywords: forecasting; ad revenue; blogs; machine learning;



¹ Corresponding author. D. S. Dias; Tel.: +94-77-308-9692
E-mail address: dulan@ieee.org