

**Title:** CodeIgniter and Artificial Neural Network Algorithm for Data Capture and Evaluation App of N.E.H Phil., Inc. Banana Plantations

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## EXECUTIVE SUMMARY

The researchers' main purpose of developing CodeIgniter and Artificial Neural Network Algorithm for Data Capture and Evaluation App of N.E.H Phil., Inc. Banana Plantations is to provide the company a system that helps them lessen their workloads and makes the monitoring of the farm's progress accurate and easier. The mobile app captures data entry and sends to the web server through HTTP Post. This data is analyzed in the web portal using Back Propagation method of Artificial Neural Network and serves as the ratings of the farm's performance. The application runs on an android platform with versions 4.2 and up. The web app is the receiver of the data from the mobile app and serves as the server. This displays the location of the sender through Google map and presents the farm status through color coding. It helps the company generates accurate reports on a daily, weekly, and monthly basis for the performance of the farm's fruit care. The researchers used OpenCV (Open Source Computer Vision) for the real-time computation of data received from the mobile app.

**Keywords:** Artificial Neural Network Algorithm, HTTP Post, Google Maps API, Geolocation API, Google Charts API