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Project Proposal

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Project TITLE: Use of Data Analytics to Improve understanding of Honey Bee Colonies

# Overview

## Project Background and Description

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|  | Pollination aided through honeybees is integral to crop production. However, there has been noticeable decline in honeybee colonies and hive losses. There are both external and internal factors causing this phenomenon. These include harmful impact of pesticides, mite infestations causing deformities in bees or robber bees that are not pollen bearing.  Through this project we would be analyzing some of these factors:   1. Correlation between pesticide use and existence of honeybee colonies 2. Create a machine learning model through which we can identify the robber bees through classification of bee images into honey bearing and non-honey bearing for effective bee hive monitoring. |

## Project Specifications

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|  | For this project we will be utilizing the following machine learning libraries  Sci-Kit Learn,  Keras (CNN)  Other analytical libraries include  Python Pandas,  Matplotlib  **Data**  is derived from Kaggle data repositories  <https://www.kaggle.com/jenny18/honey-bee-annotated-images/home>  <https://www.kaggle.com/kevinzmith/honey-with-neonic-pesticide/home>  https://www.kaggle.com/ivanfel/honey-bee-pollen  **GitHub Link** <https://github.com/Richa309/UCIDB_Final_Project> |