

A Beehive Monitoring System Featuring Optical Flow Measurements

The goal of this thesis is to design, implement, and evaluate a Beehive Monitoring System. Such a system acquires data about the beehive and its surrounding. It does that by reading out sensors for measuring temperature, weight, weather, and movement. Unlike other systems that have been developed in the past, it incorporates the concept of optical flow to gather information about the movement of the bees within the hive. This new source of information can prove to be helpful for scientists in their research about bees.