Promoting Runner Cutter Automation

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According to the 2021 UC Davis Cost Study of Strawberry Production, rummer removal, as the second labor-intense operation in strawberry production, is estimated to cost $2,683 per acre. With the help of machine learning techniques, we developed a deep learning framework that can detect runners in strawberry fields (Fig. 1). During this project, we collaborated with a robotic company, called Strio AI, on developing a robotic runner cutter. A prototype of the robotic runner cutter was built and successfully tested in the Watsonville – Salinas area.

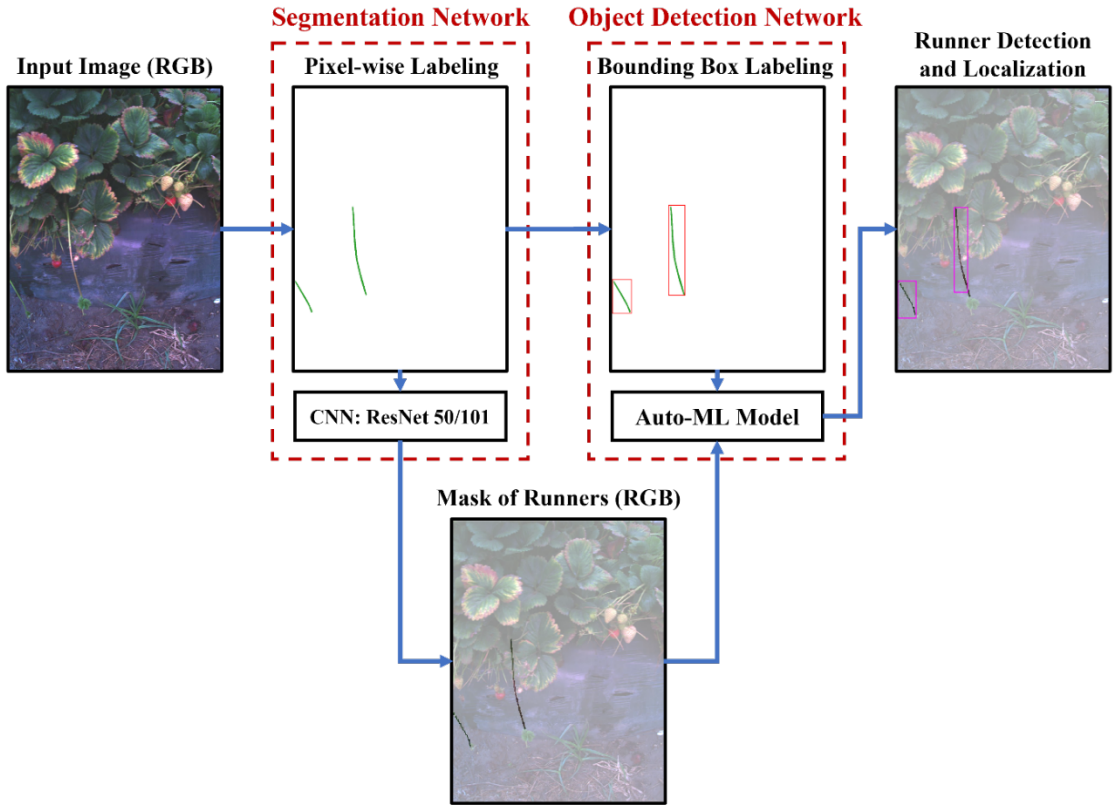

Figure 1. Two-step framework to detect strawberry runners in RGB images.

Figure 2. A) Tractor mounted enclosed data collection platform and B) Strio AI robotic platform.