Multi-Fingered Soft Gripper Driven by Bellows Actuator for Handling Food Materials

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- The soft gripper is constructed by a bellows actuator and a multi-fingered continuous part.
- The gripper is driven by the contraction of the bellows actuators which are 3D printed.
- The multi-finger part is fabricated using casting process with rubber material.
- Three different grippers with two, six, and eight fingers were fabricated and experimentally tested on 5 food materials.
- Results suggested that the two-fingered gripper performed the best in terms of success rate.

The proposed soft gripper grasping a fried chicken