

# Indoor Autonomous Mobile Robot for Small and Medium Sized Restaurants

**Status:** Filled

**Group Members:** Ibrahim Helal, Dmitrii Gusev, James Liu, Nam Anh Mai

**Sponsor(s):** Self-funded

**Supervisor(s):** Amr Marzouk, PhD, PEng, Lecturer, Mechatronic Systems Engineering

## Project Description

Small businesses have suffered from the always rising labor cost specially in the food and beverage sector. When COVID-19 hit the world, many small businesses were hit the most especially small and medium sized businesses that rely on human interaction. And with COVID-19 forcing the limitation of human personnel interaction, businesses suffer even more. On the other hand, before COVID-19 hit our world, it was anticipated that one of the jobs at highest risk of being automated is waiters. With the current technological advancements in the field of autonomous vehicles, it is possible to empower small and medium sized business with tools such as indoor autonomous mobile robots to deliver goods around the work area while still keeping the hospitality factor in the waiter's job. This project is intended on re-imagining the automation of the small and medium sized businesses in the food and beverage sector by creating an autonomous mobile robot platform.



Figure 1.0: Waiters serving customers during COVID-19

