Pizzair

An **AI**-enabled, fully **autonomous** Pizza **delivery** platform

Team 4:
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Value Proposition

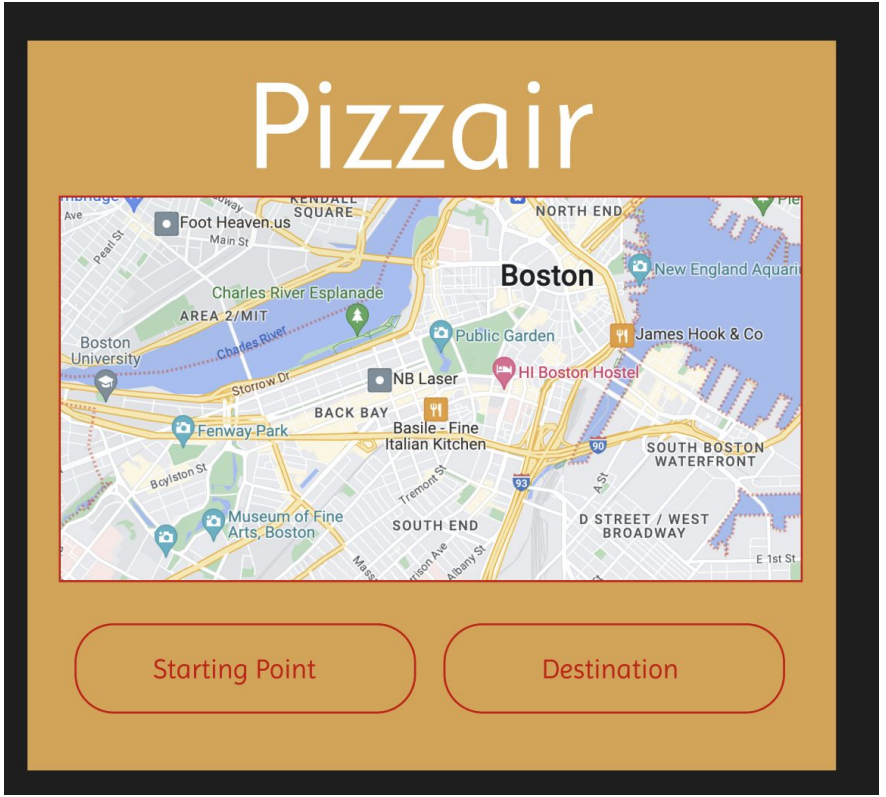
- For customers dissatisfied due to long wait times and cold pizza
- Who wants pizza sent to door fast, warm, and cheap
- Pizzair is a fleet of drones that maintained by pizzerias
- For delivery on demand whereby customers receive hot pizzas in a defined radius within 10 minutes of it being prepared.
- Unlike DoorDash, UberEats that charges high delivery fee and impacting restaurant profitability
- Our product provides a high efficiency, high rotatability, minimal labor cost solution for delivery

Requirements

- $3000 landed cost per drone
- Drones capable of operating in different weather conditions
- Ensure pizza is delivered in an acceptable condition
- Ensure easy customer access to pizza
- Route optimization

Define your MVP

- A drone that delivers tiny object to destination as planned
    - App will tell Drone where to go
- During flight food isn't destroyed



Project description: We are developing a fully automated aerial drone for low distance, fast Door-to-door pizza delivery with minimal human overhead.

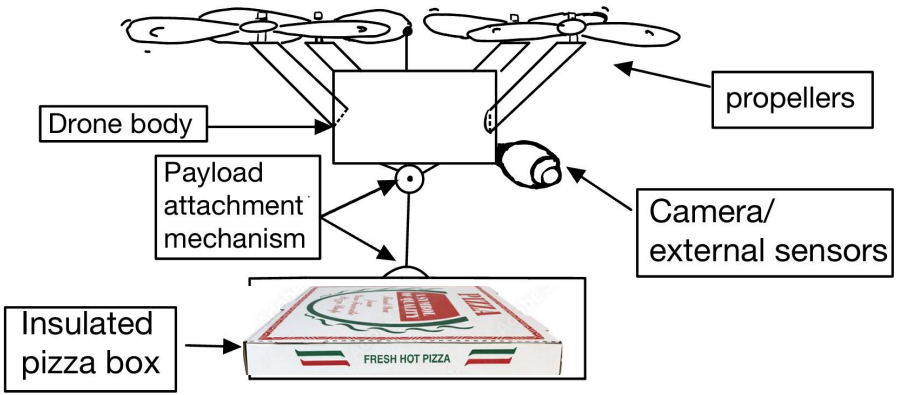
Societal Impact: Accelerates transition to full service customer satisfaction by automating human error-prone delivery and ensuring product quality is preserved in delivery.

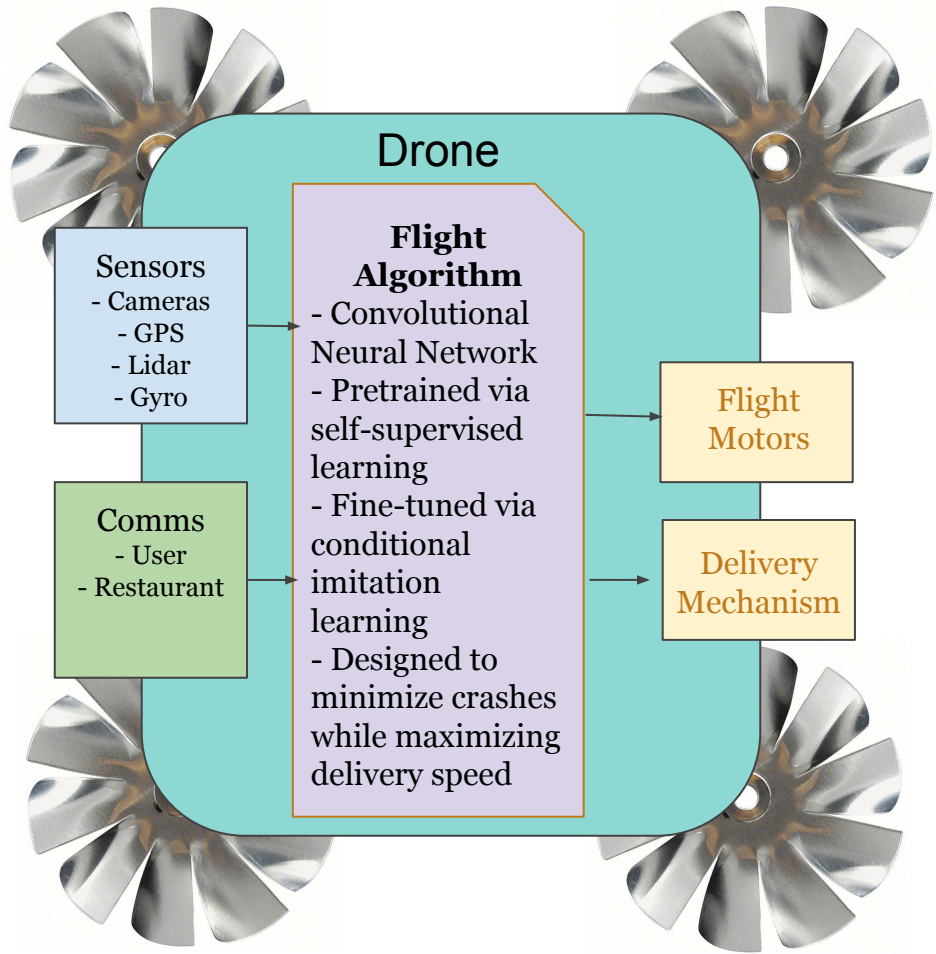
Special Sauce

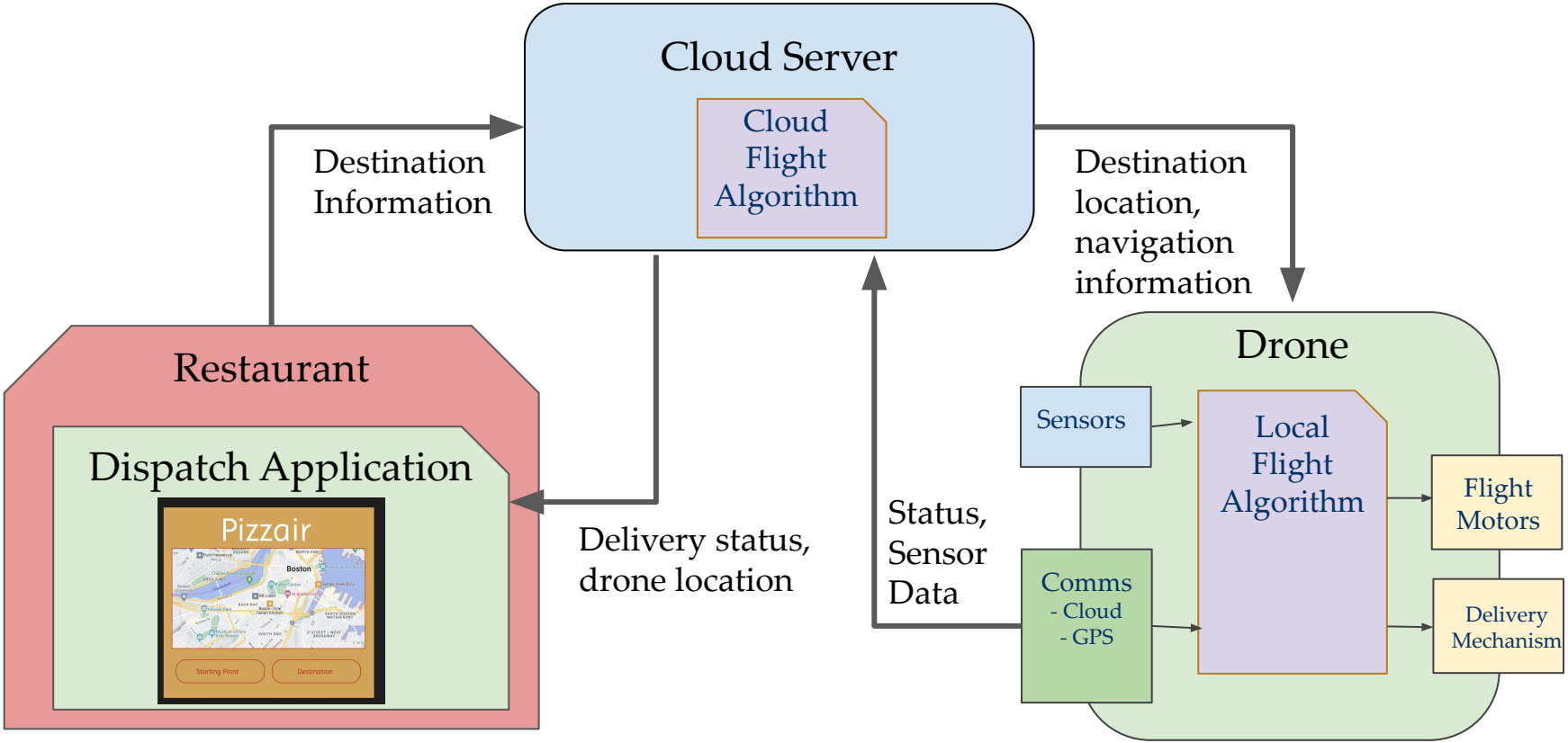
- Harness capable of maintaining temperature and easy access of pizza
- Self-navigation and delivery status alert system
- Route optimization

System Design

Side view






Cloud Server
Cloud Flight Algorithm
Destination Information
Destination location, navigation information
Restaurant
Dispatch Application
Pizzair
Boston
Starting Point
Destination
Delivery status, drone location
Status, Sensor Data
Drone
Sensors
Local Flight Algorithm
Flight Motors
Comms
- Cloud
- GPS
Delivery Mechanism

30,000 images

Safe: 0
Steer: Forward

CNN

Adapt to new situations