



Putting healthy food in the hands of the food insecure

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Food Waste and Loss

13.5 million people are **without fresh food access**

The 63,000 grocery stores to **can't verify freshness to donate**

33% of food in the US is wasted, producing 3% of our GHGs



NSF Phase 1: User-inspired design process we learned from:



*163 food
insecure
individuals*



*38 distributors,
donors, and
farmers*



*27 institutional
partners*

NSF Convergence Program, Track J: Food & Nutrition Security
Phase 2 Awarded in January 2024

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Our Phase 2 Solutions:

FoodLoops App to coordinate food access, donations, and data

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Quantum Nose to determine the safety of donated food.

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Quantum Nose to determine the safety of donated food.

This integration provides real-time systemic resiliency data



Quantum Nose

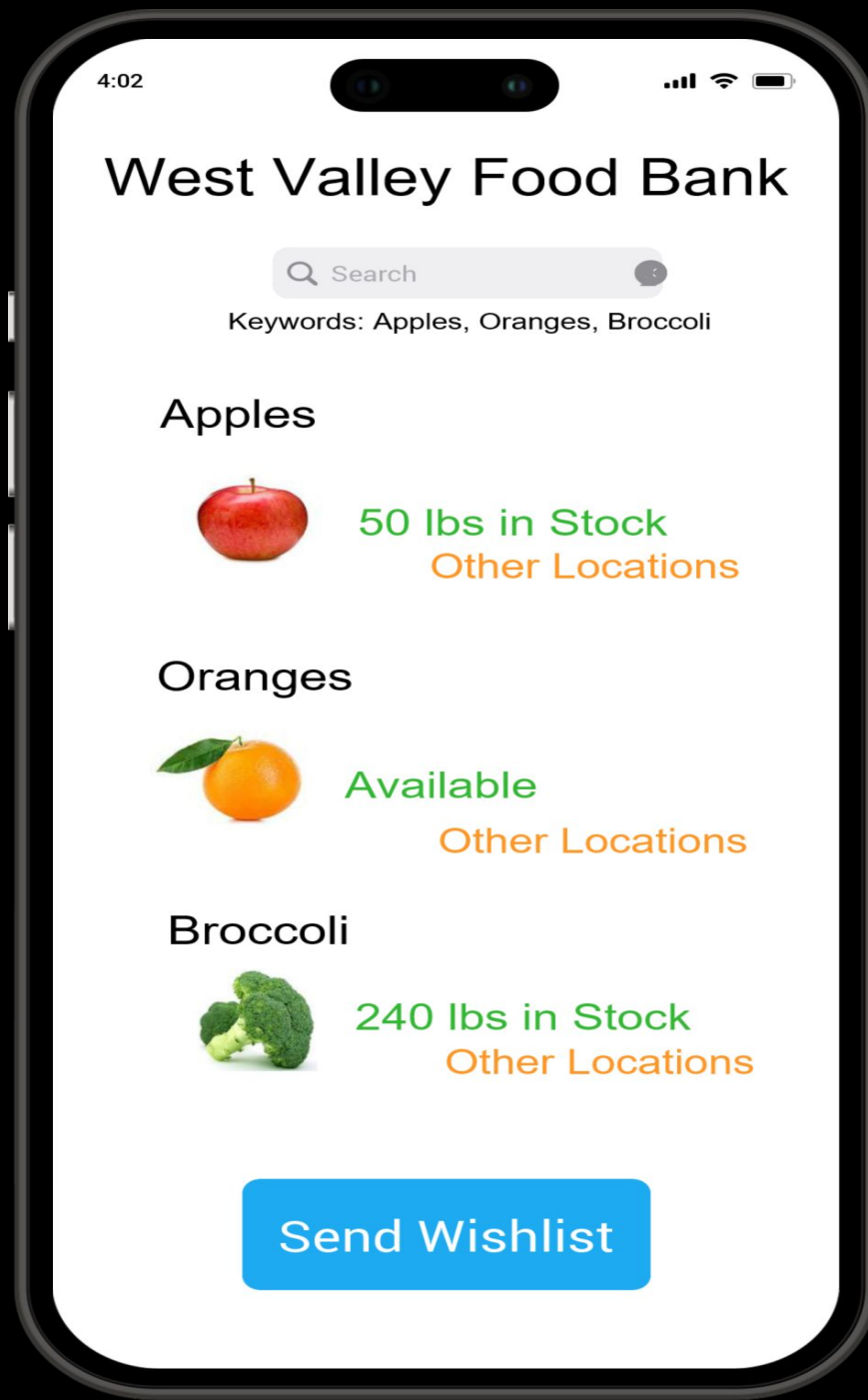
Device measures freshness through gas emissions using quantum physics.

First prototype that quantifies food safety



Patent Application #1: WO 2022/140634

Patent Application #2: 63/584,943



FoodLoops App & Website:

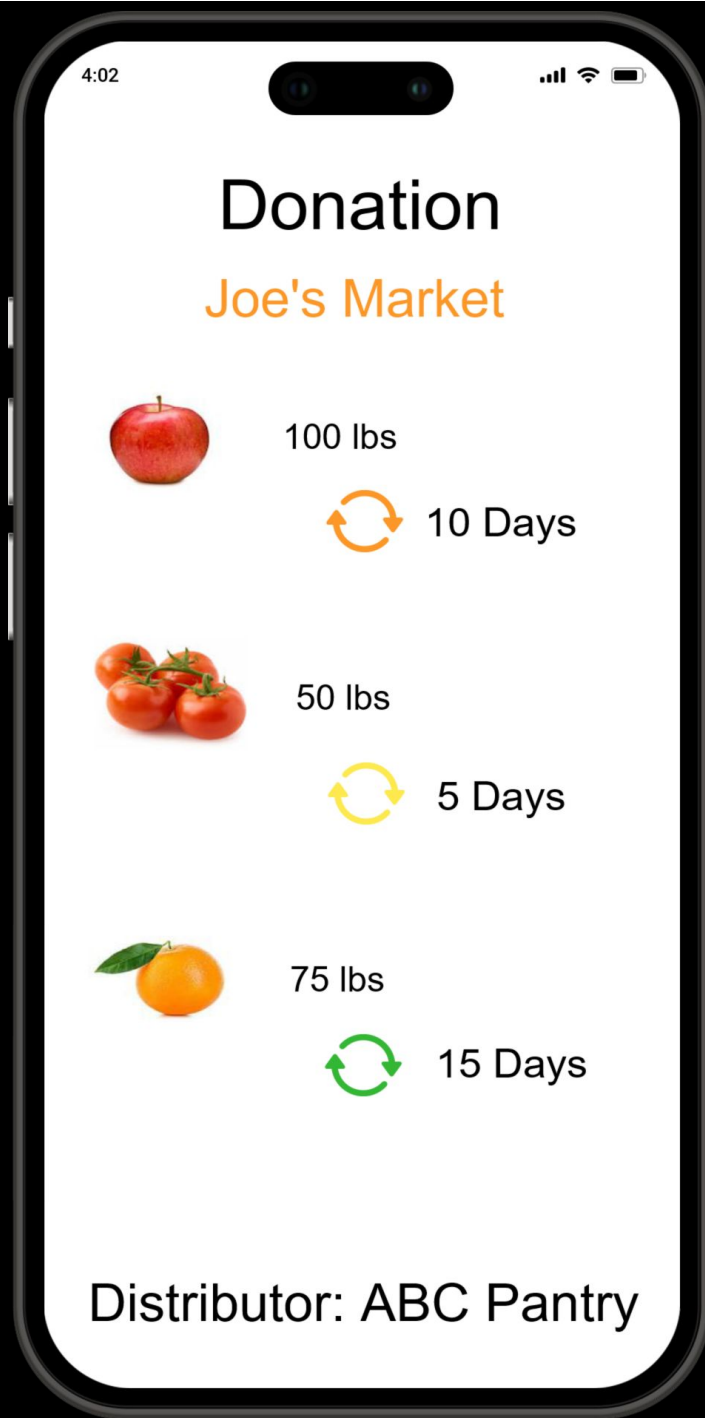
- User-friendly interface (En/Sp)
- Mapping function
- Data collection (non-identifying)





Data from Quantum Nose will be integrated into FoodLoops app to help with cold storage and delivery time decisions.





FoodLoops App & Website

- Food freshness follows each food item to help with pantry decisions based on cold storage and time to delivery.
- Create inventory for pantries

Provide institutions and agencies with Real-time data for infrastructure decisions based on forecasting data and greenhouse gas reductions based on their distribution decisions and existing infrastructure.



Innovation and Integration

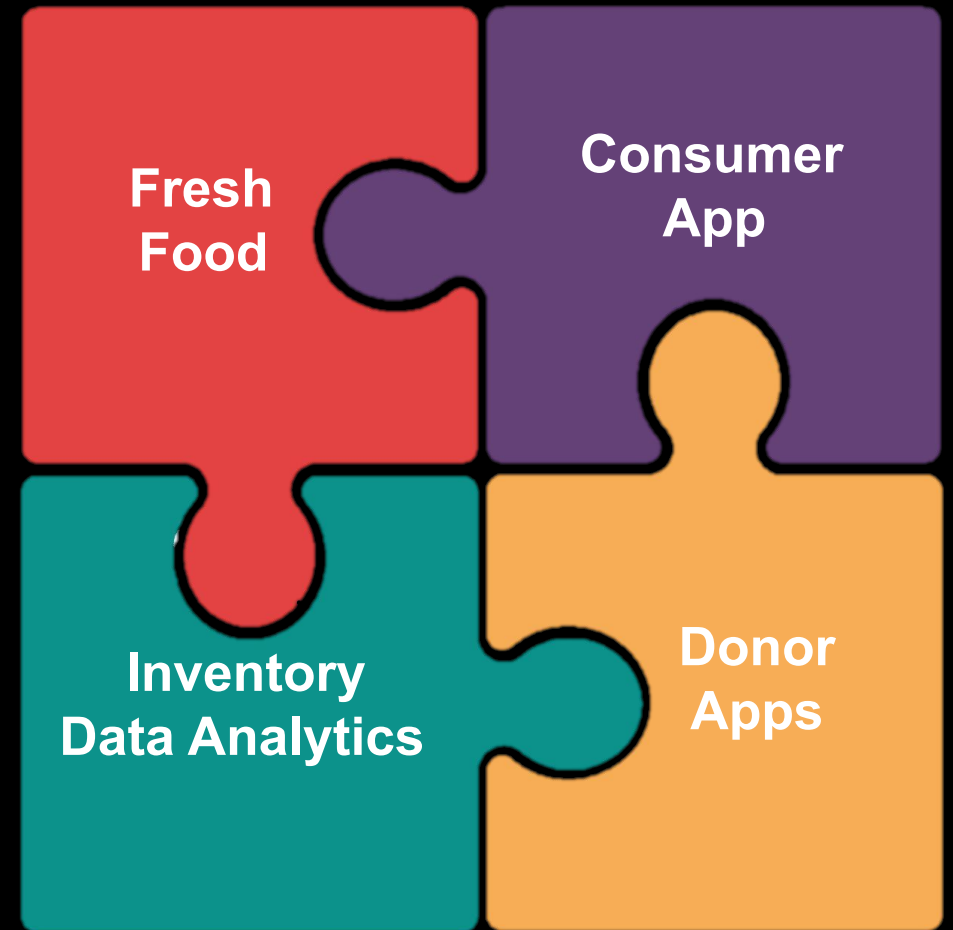
Create an End-to-End Holistic Solution

Donor Apps Exist –Building on ChowMatch

Consumer Facing App - Exclusive

Freshness Sensor - Exclusive

Institutional Console - Exclusive



Our Project Team

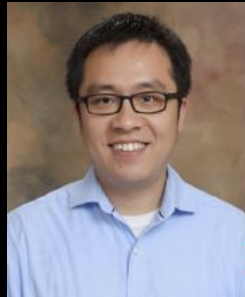
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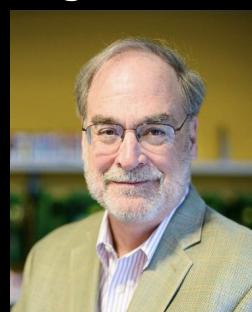
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Thank you!



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