

GOOD SYSTEMS

A UT Grand Challenge

Thank you for joining the webinar.
The program will begin at 2 p.m.

Panel presentation and discussion

Last Mile Autonomous Delivery Systems



Short to Medium Range Autonomous Delivery System
<https://smads.netlify.app>

Robots making a difference on campus

Principal Investigators

Junfeng Jiao, Associate Professor, School of Architecture

Luis Sentis, Associate Professor, Department of Aerospace Engineering

Joydeep Biswas, Assistant Professor, Department of Computer Science

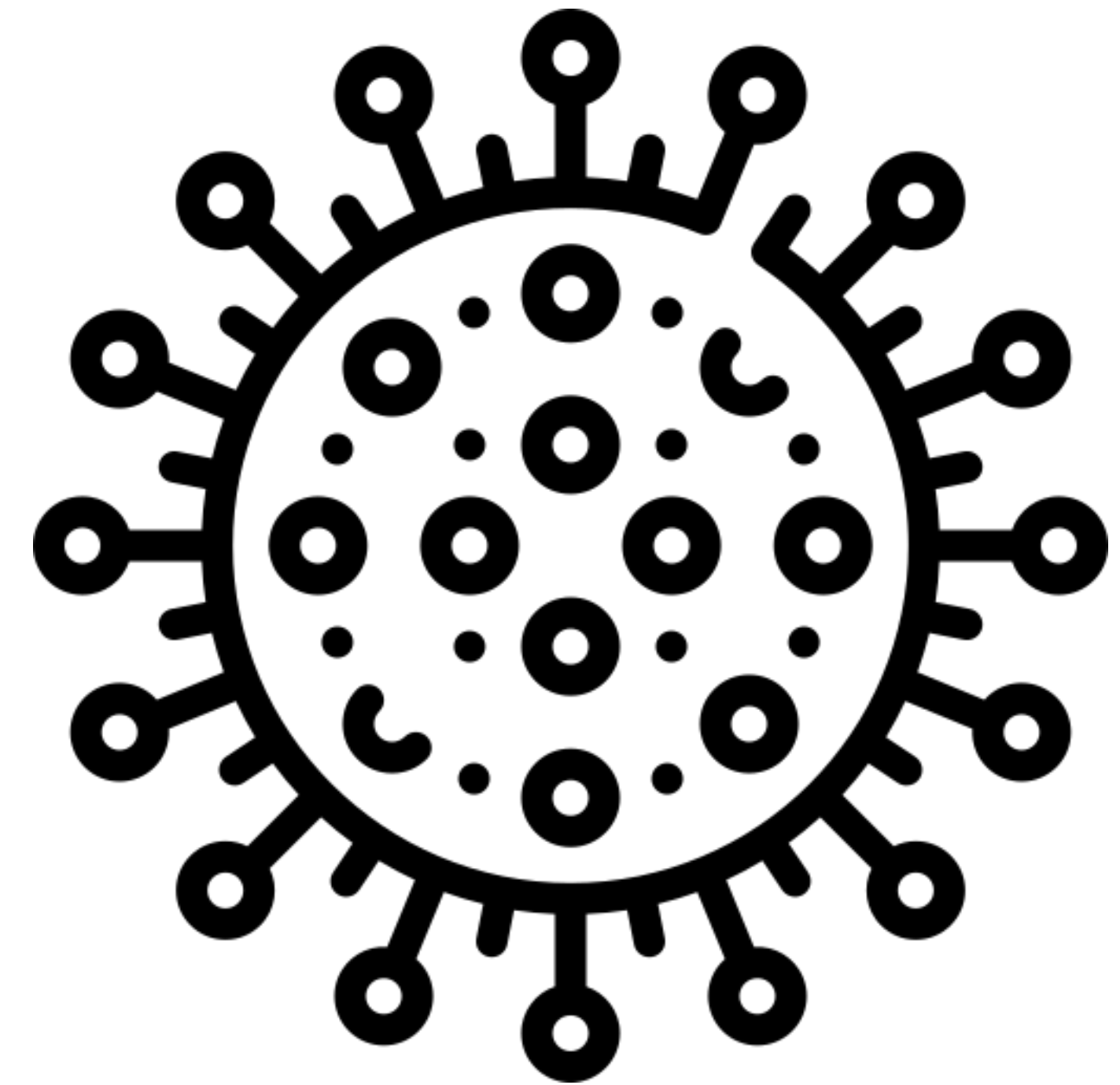
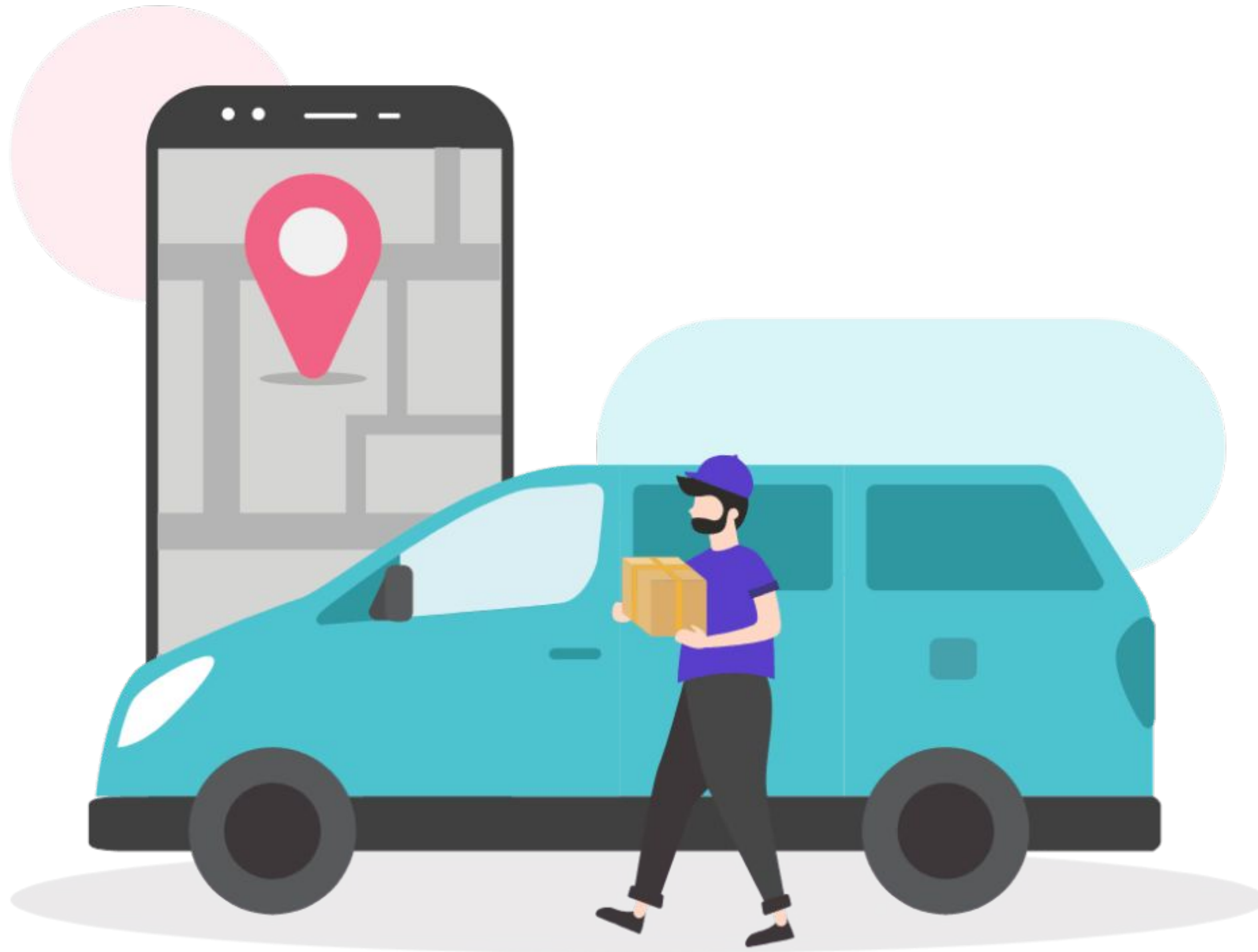
Justin Hart, Assistant Professor of Practice, Department of Computer Science

Students

Max Svetlik • Asha Jain • Nick Machak • Cem Karamanli • Kent Hensen • Kaiyu Zhou • Anurag Patel •

William Kwon • Ryan Gupta • Minkyu Kim • Daksh Dua • Marika Murphy • Shikhar Gupta • Kavan Sikand

People depend on deliveries, and with COVID-19 we need a more hygienic system.



Autonomous delivery robots can provide contactless and safe deliveries.

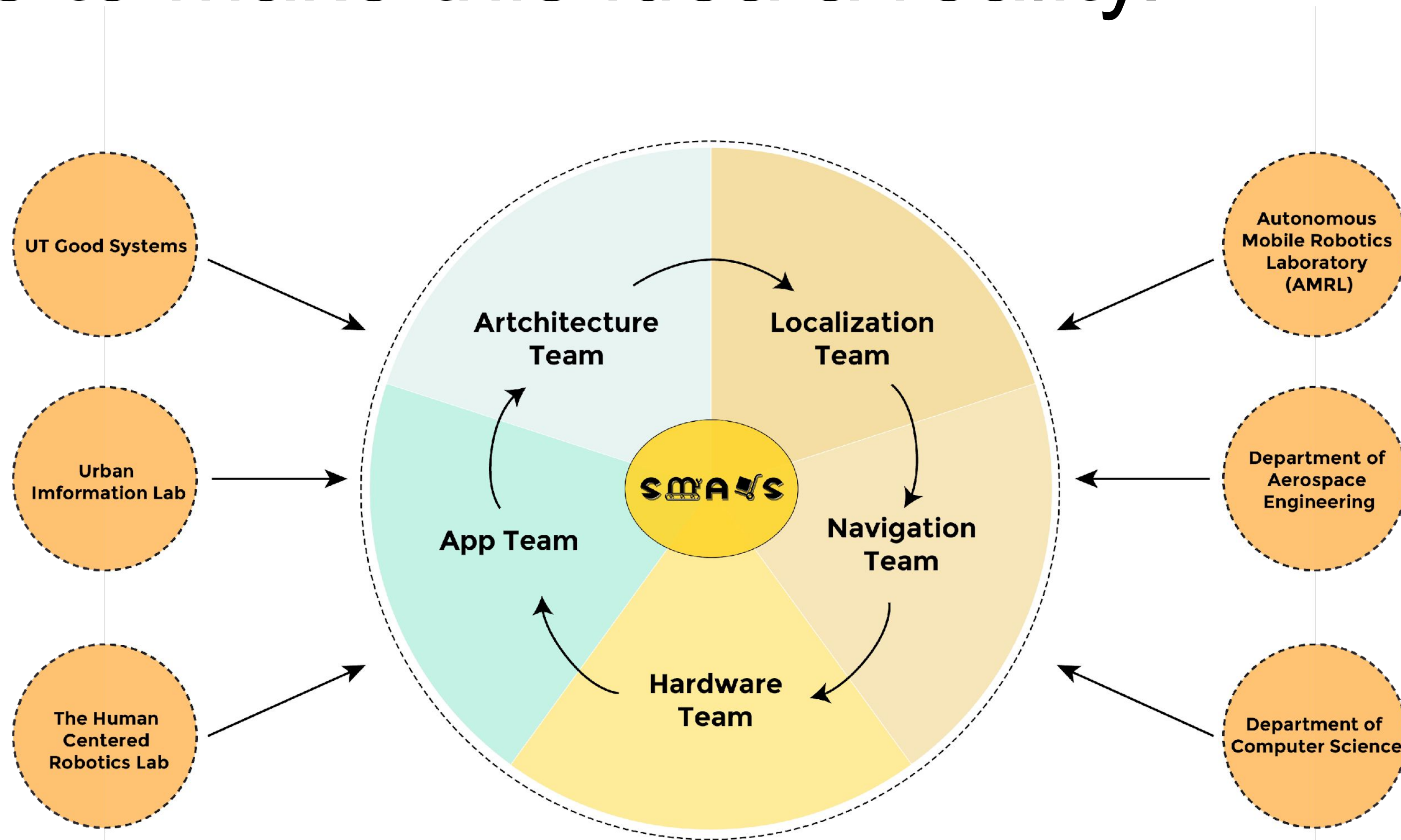


Lemonade loaded onto Jackal robot

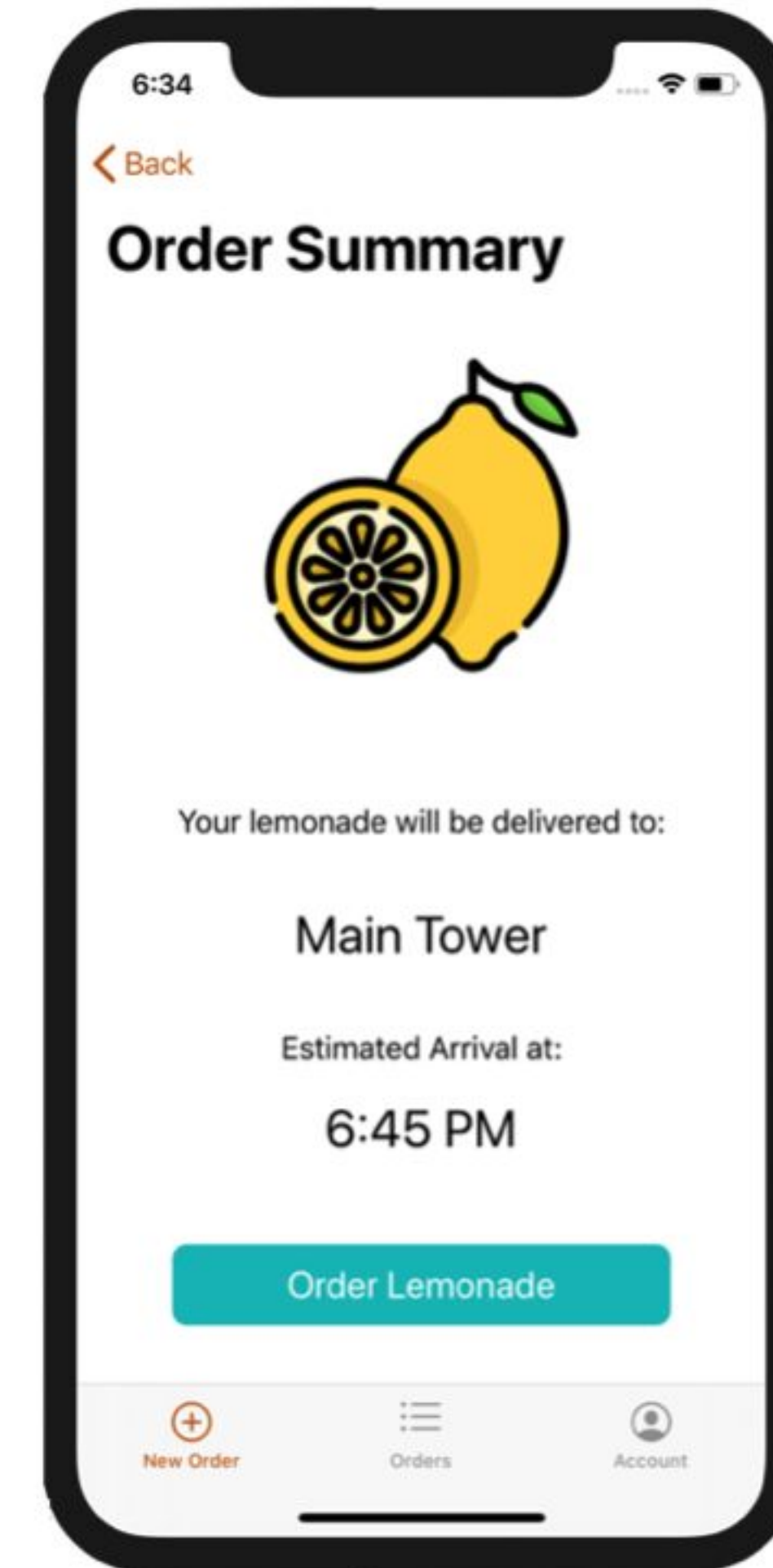
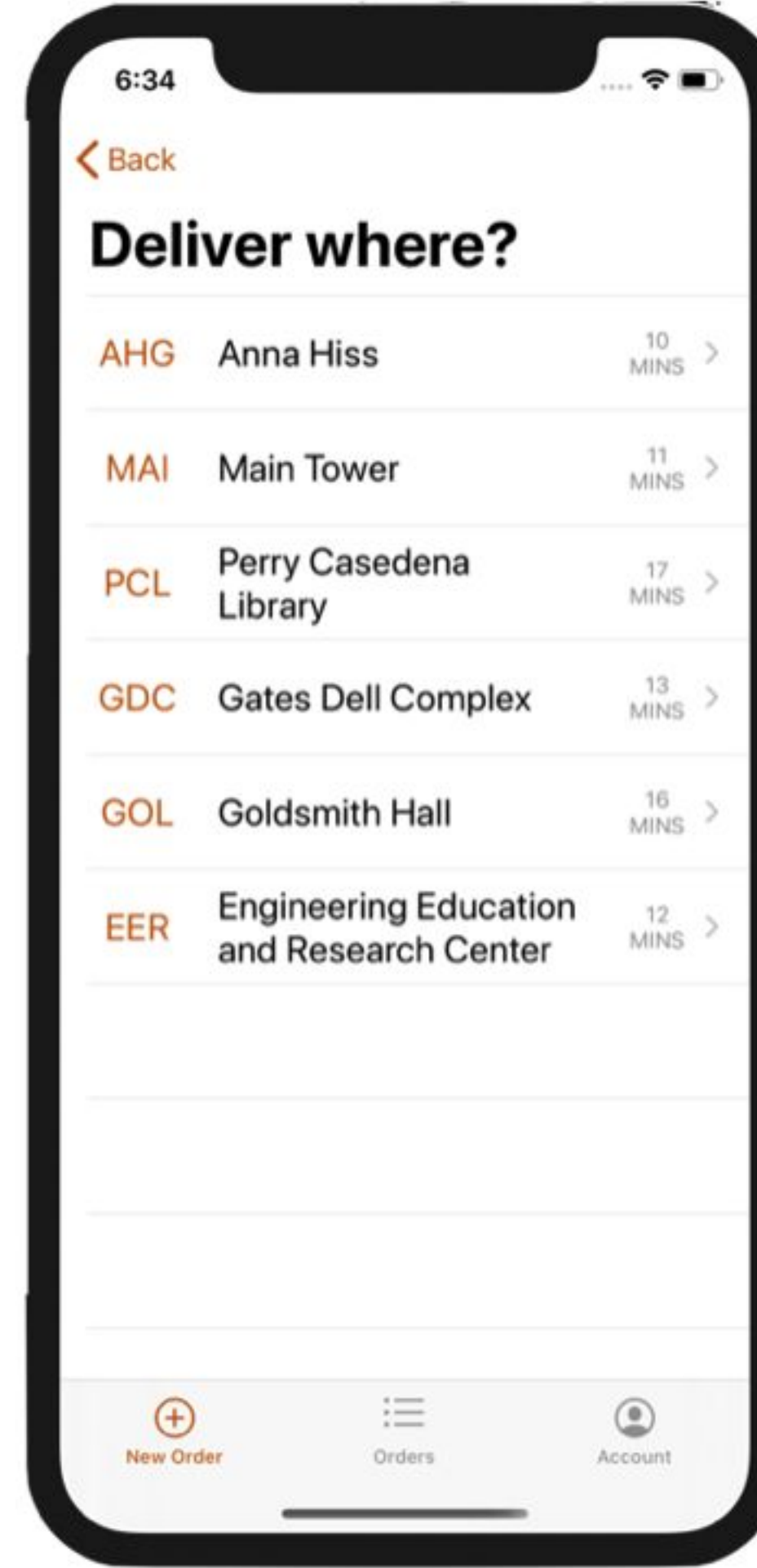
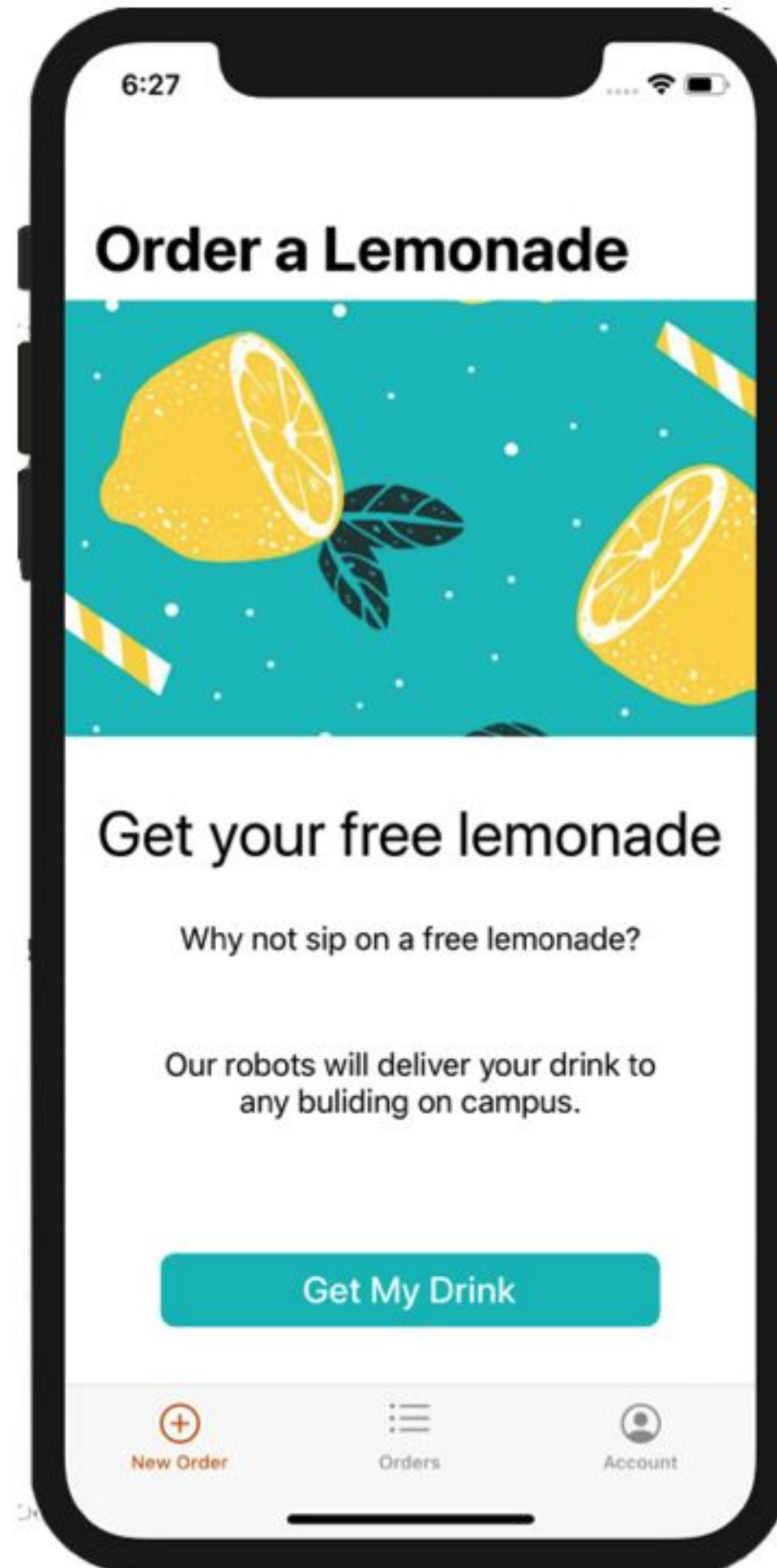
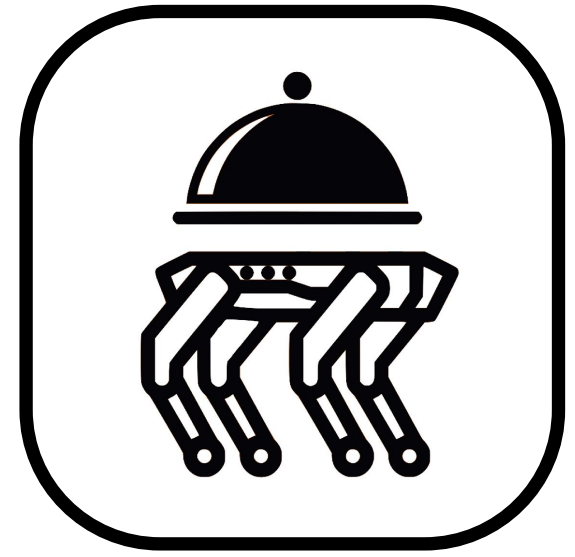


Lemonade delivered to customer via Jackal robot

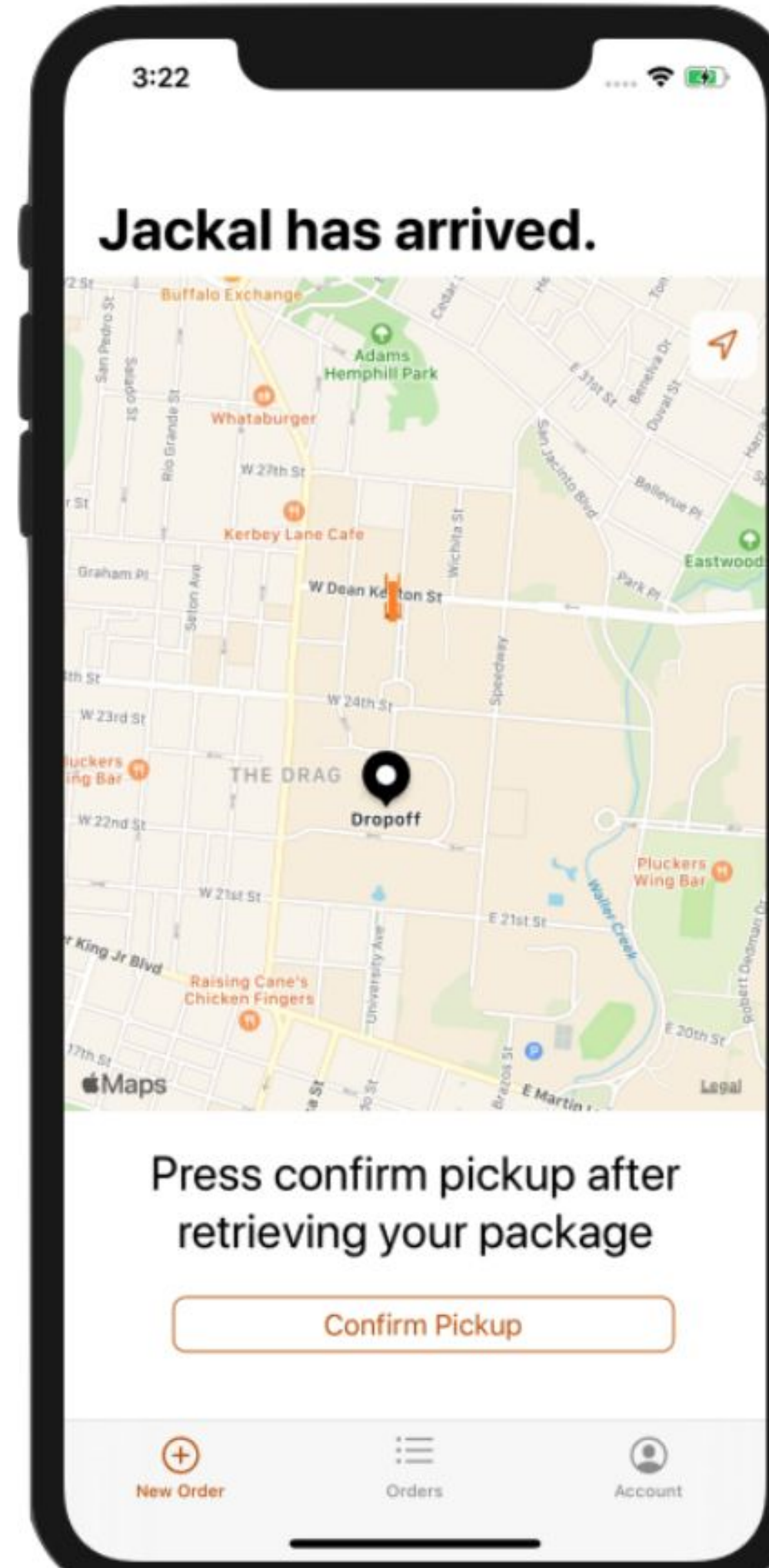
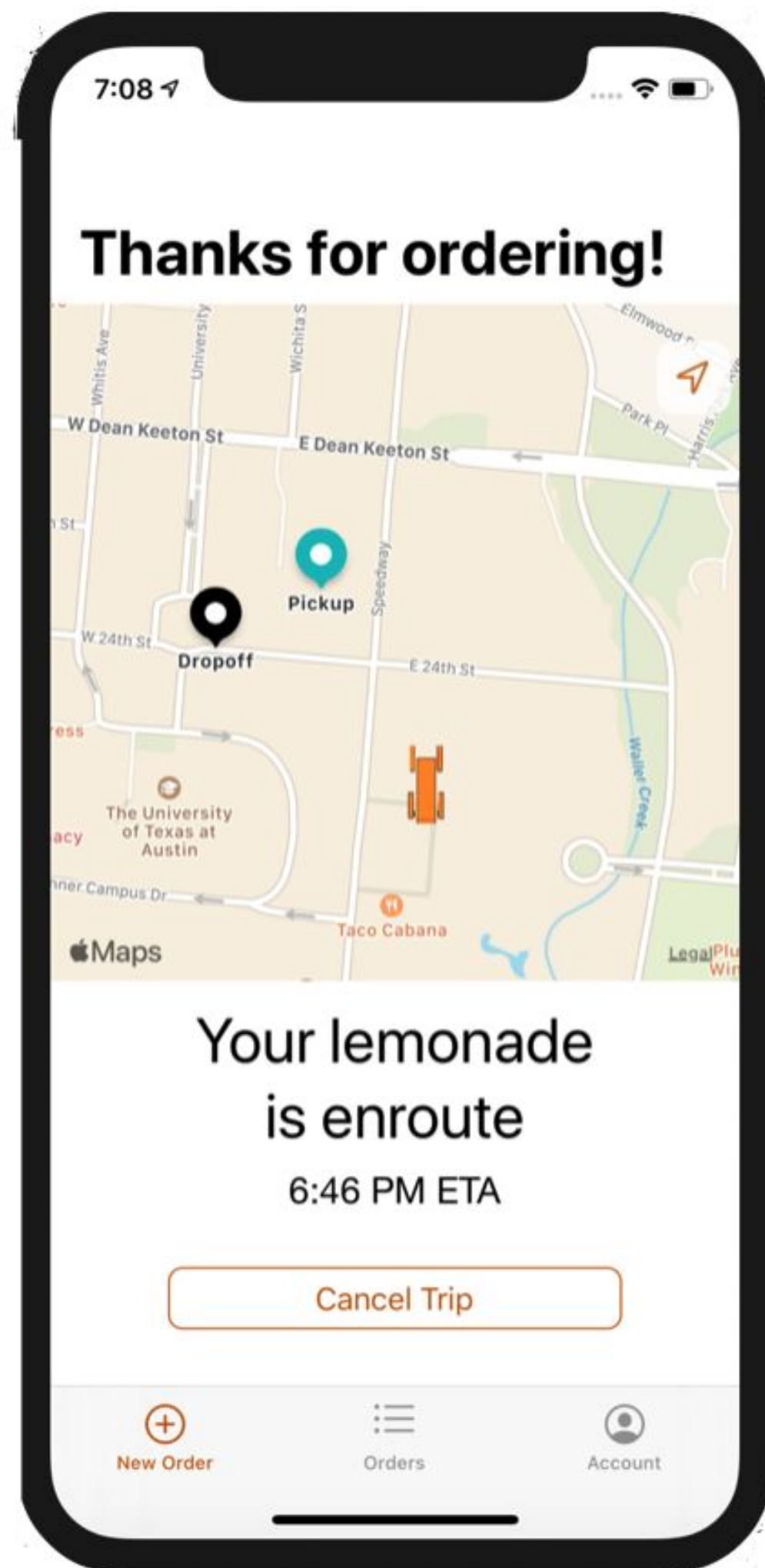
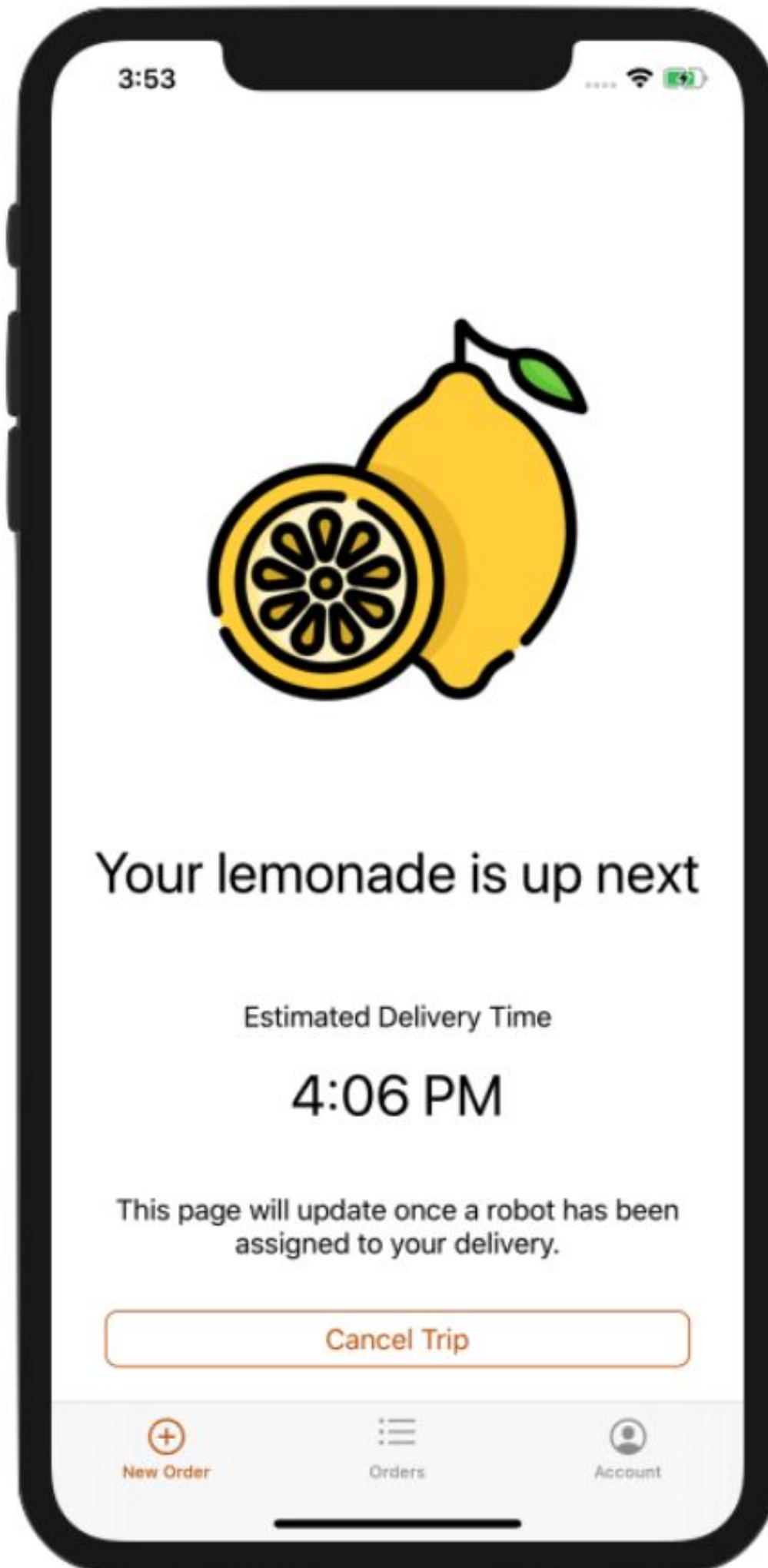
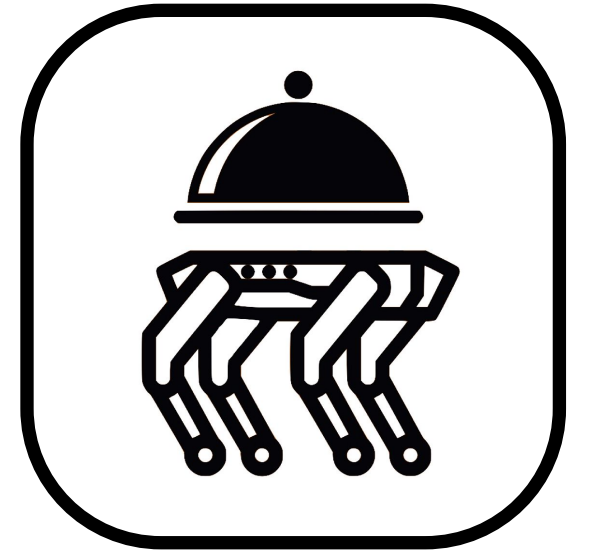
Our team is integrating the work of several UT labs to make this idea a reality.



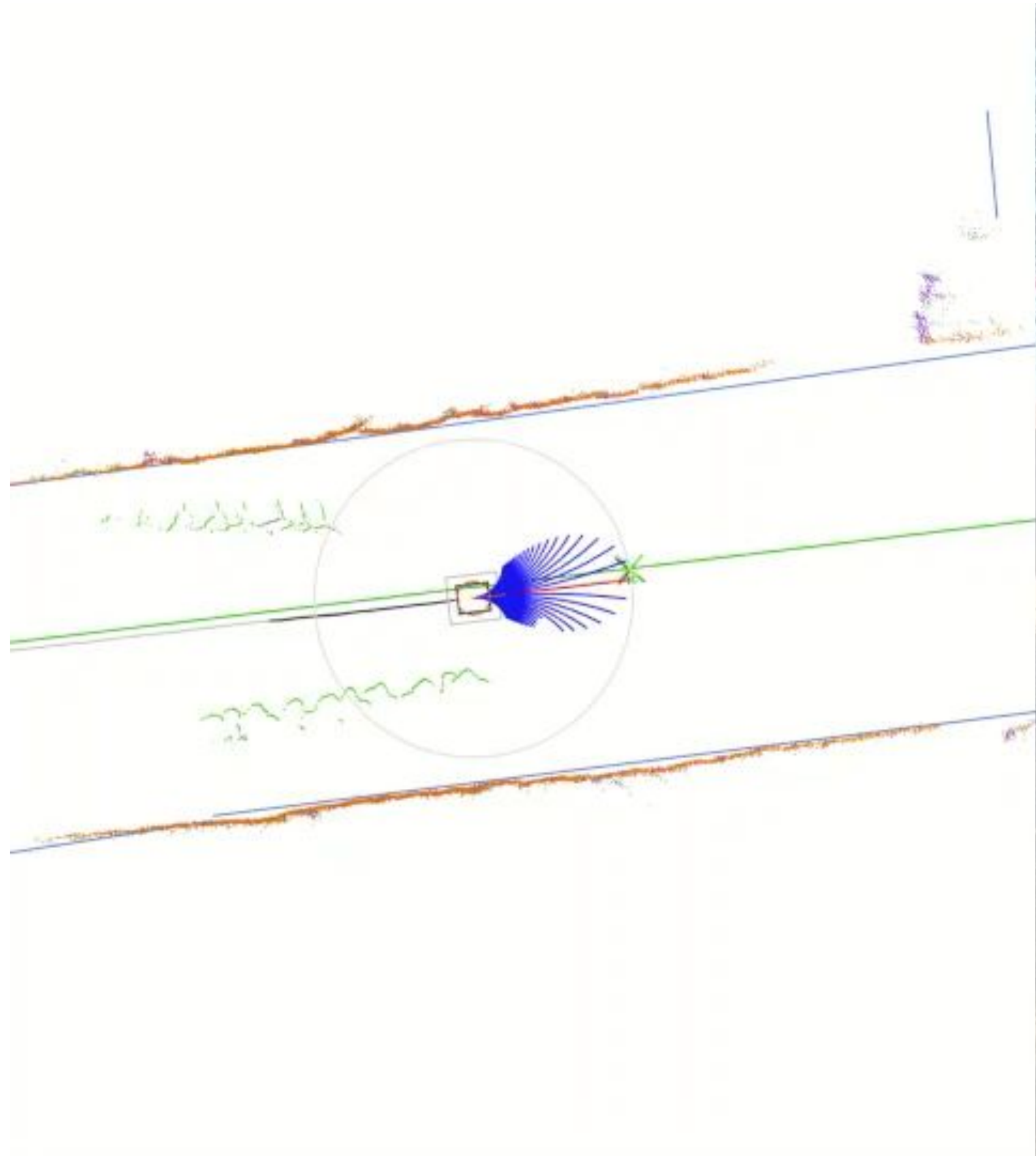
Every delivery begins with our iOS App.



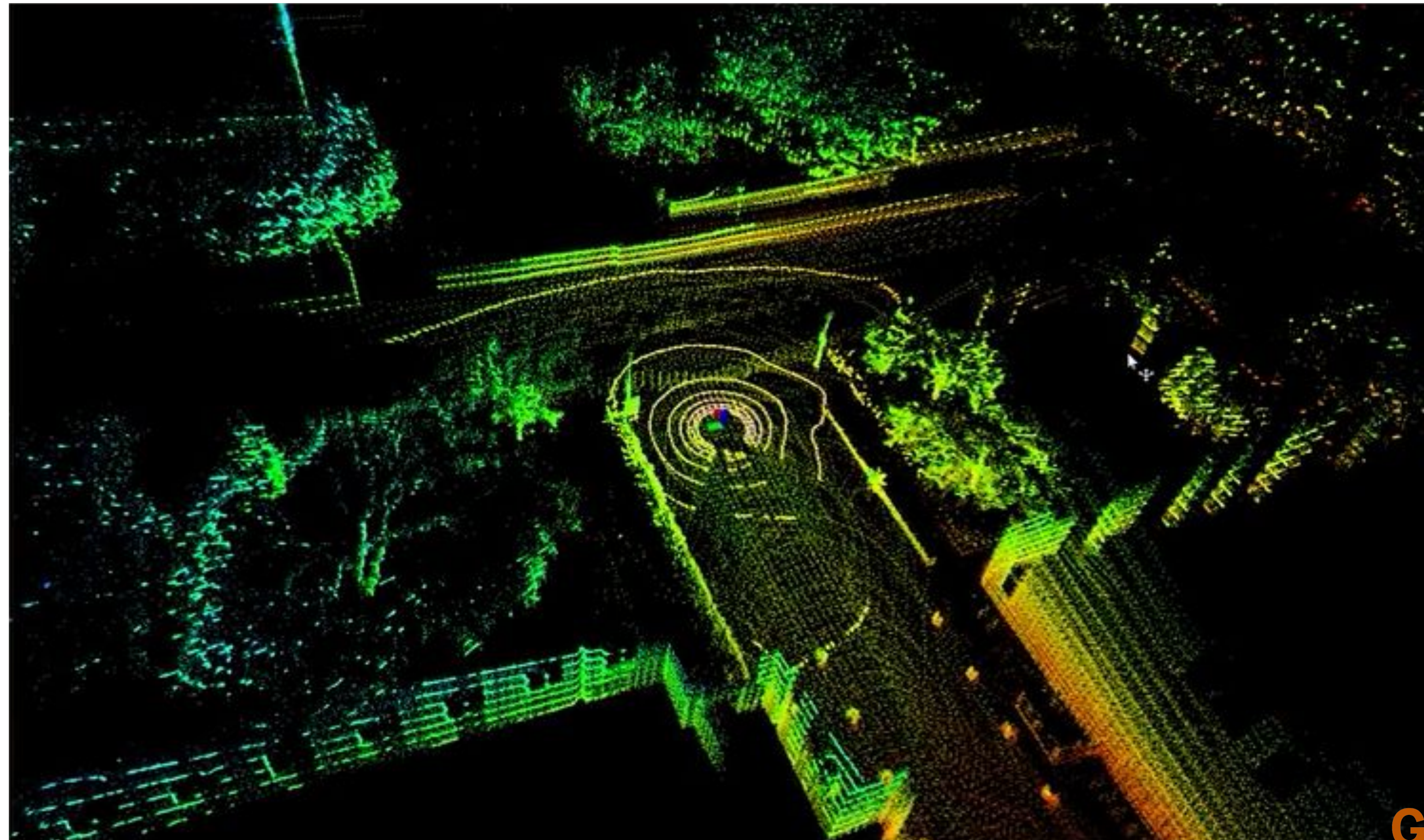
Customers can follow their order every step of the way.



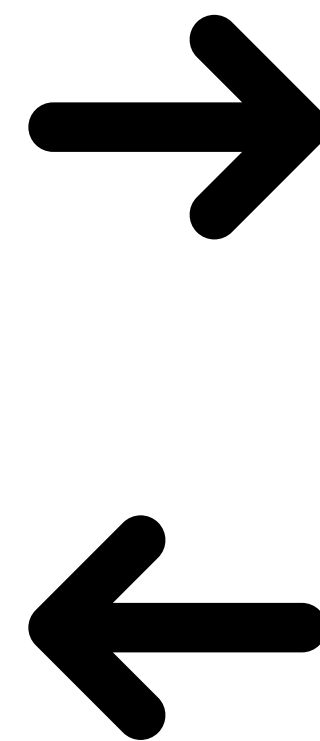
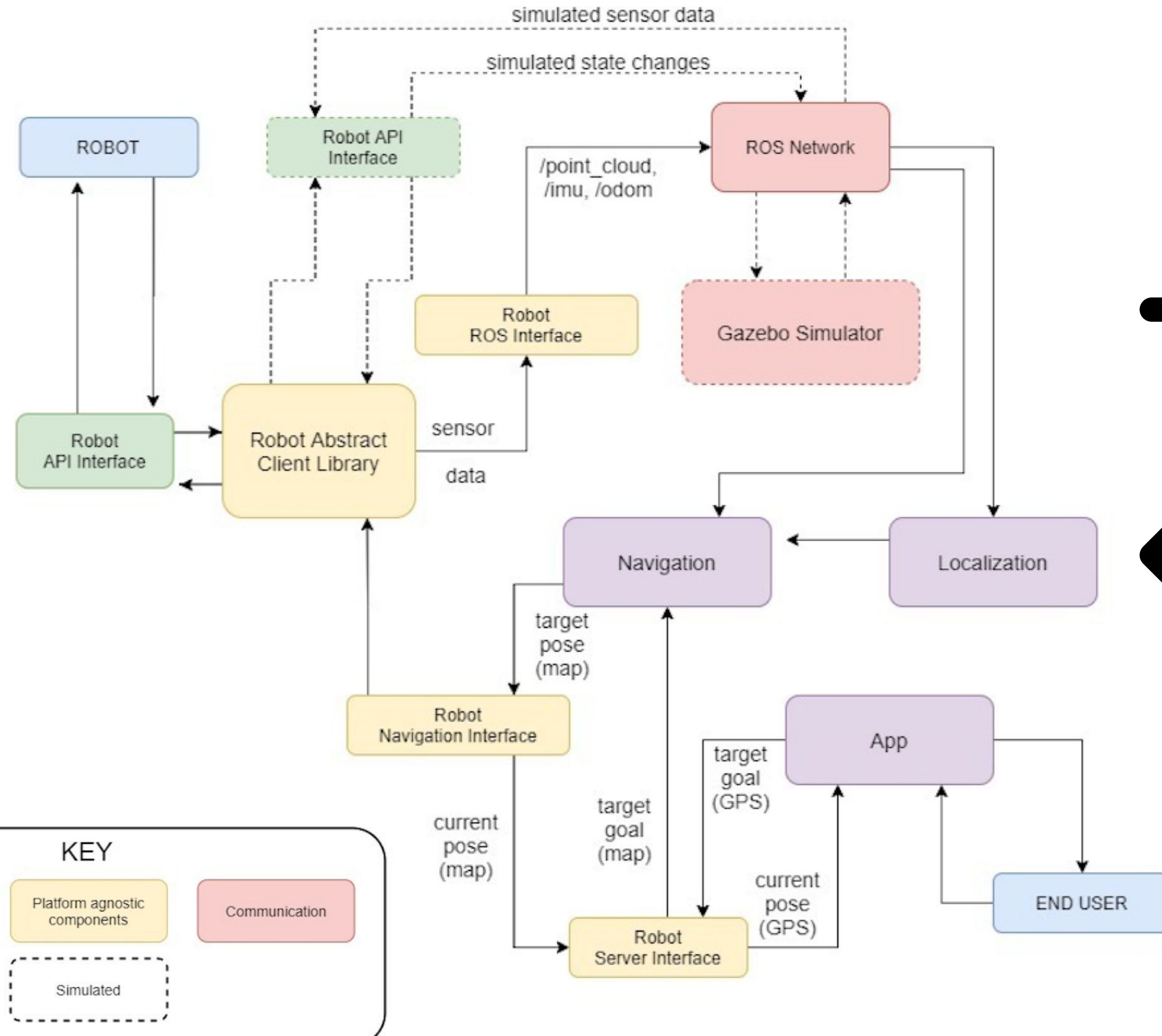
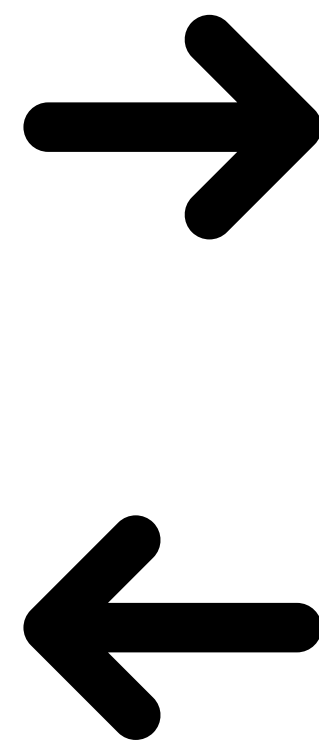
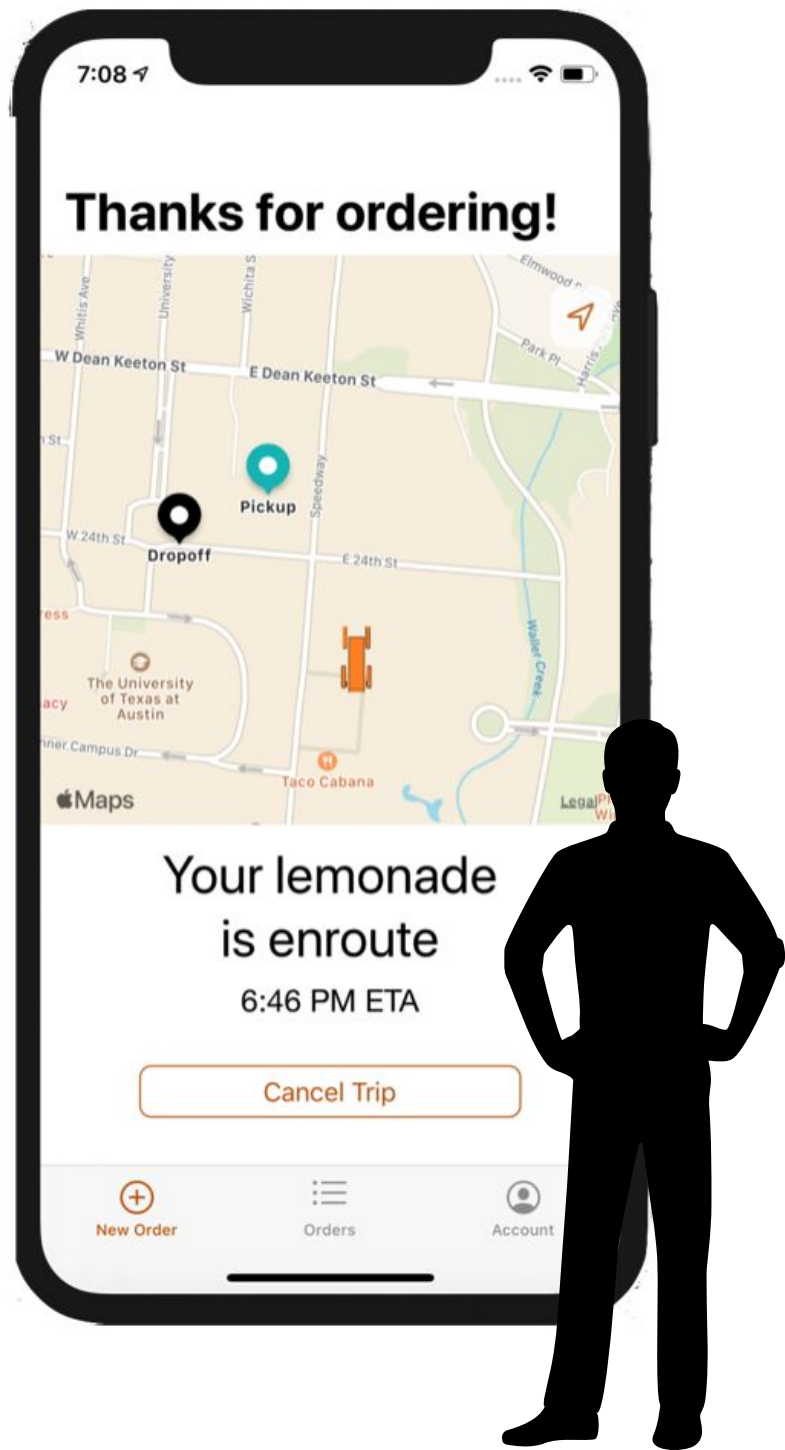
Our robots plan their delivery route autonomously and allow deviations for unexpected obstacles.



A localization algorithm determines the robot's location in mapped environments.



Intricate system architecture streamlines communication between the customer and robot.



Several robot platforms are being developed.



Unitree A1

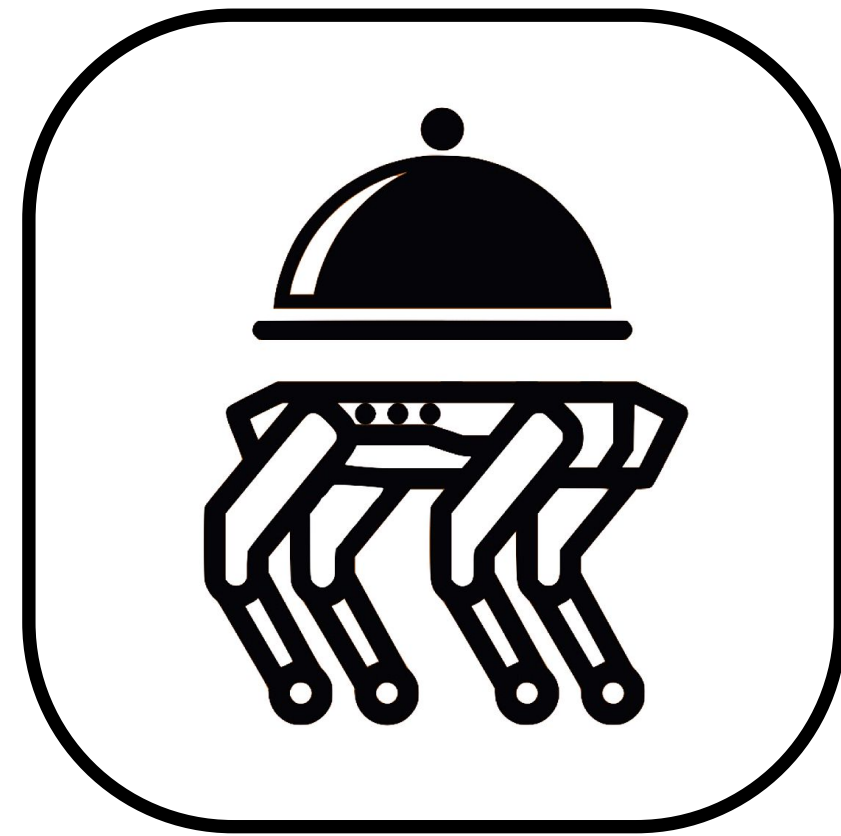


Unitree Laikago



Clearpath Jackal

Our future goals include...



Our app is coming to the App Store soon



We hope to run a lemonade stand as a proof of concept, and then possibly integrate with UT Dining Services.



A1 will be able to service deliveries.

Let's see it in action. Stay tuned for the live demo.



Thanks for ordering!



Your lemonade
is enroute

12:03 PM ETA

Cancel Trip



GOOD SYSTEMS

Thank you!

Please get in touch with questions.

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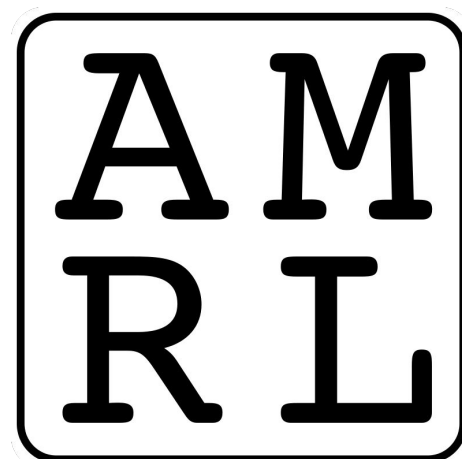
Learning Agents
Research Group

cs.utexas.edu/~larg/index.php/Learning_Agents_Research_Group

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TEXAS Robotics



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