HitchRide

A rideshare network for students
by students

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HITCHRIDE

43%

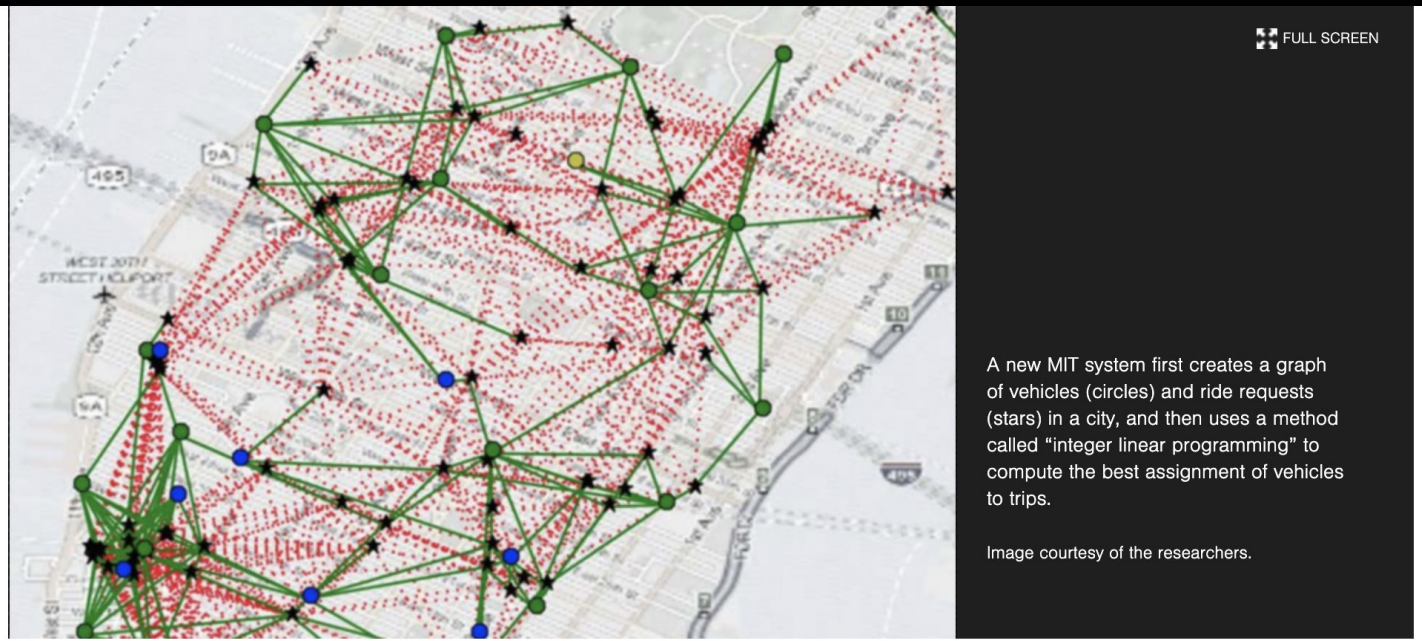
Share of Americans who have used ride-hailing apps in the last year

Even higher for college-age students!

MIT News

ON CAMPUS AND AROUND THE WORLD

Browse or Search



How ride-sharing can improve traffic, save money, and help the environment

Study shows carpooling apps could reduce congestion by a factor of three while still serving the same number of people.

HITCHRIDE

Problem

HITCHRIDE

Searching these groups to find rides becomes very tedious.

HitchRide can fix this! How?

A rideshare network for students by students

HitchRide is a straightforward web app that connects college students looking to share rides.

HitchRide makes it effortless to enter when you will need a ride, choose your origin and destination, and find other students taking the same trip.

HitchRide connects you to the other students who need the same ride as you, exchanges your emails ahead of the time so you can meet, and guarantees that they will be a college student, just like you, by requiring a “.edu” email for signup.

Use Cases

Students who own a car and will be making either a one-off or recurrent journey can create a carpool group of other students to cover transportation costs

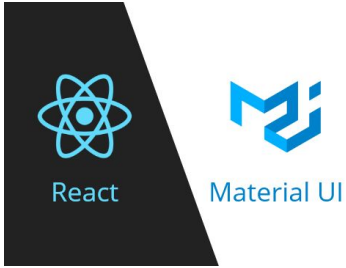
Students without access to a vehicle can create/search for a group of students to share an Uber/Lyft, substantially reducing per person costs of such services

Students who are afraid to travel alone and would prefer the company of additional college students

Technologies / Project Details

HITCHRIDE

- Front End
  - ReactJS
  - Material UI Framework
- Back End
  - PostgreSQL
  - Flask/SQLAlchemy
  - Axios
- Cloud Deployment
  - AWS EC2 Instance
  - RDS PostgreSQL Database
- APIs
  - Google Maps API
  - Leaflet
  - Uber/Lyft API (planned)



Flask SQLAlchemy

Challenges

- Git!
- Development locally vs. on the AWS EC2 Instance
- State flow from child to parent components in React
- JS dynamic typing and other quirks
- Data communication between front end and back end
- Learning/Installing the same version of technologies
- Database schema changes affecting both front/back end (ER Model for relational database)

Improvements

- Use TypeScript and Redux
- Implement/Integrate Uber and Lyft APIs
- Migrate to an Amazon RDS database
- Work on multiple pages/routing (React-router)
- Implement Mobile App (iOS/Android/React Native)
- Login/Verification functionality (backend complete)
- Implement algorithm for pickup on the way (log time search using kd tree)
- Implement ratings feature (backend complete)
- Automatically split the cost and charge the credit cards

Questions?

Thank You!

CapOne Tech Summit has really been an amazing experience and we've learned so much. We can't thank the mentors, workshop leaders, and fellow summitteers enough.

HITCHRIDE

For the Students, By the Students

Long Live 905