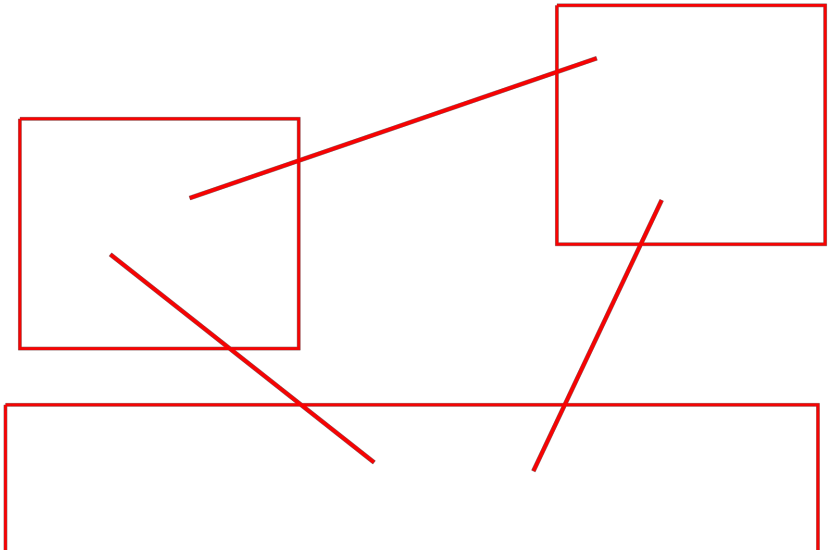
Bridgey
Bridging Blockchains

Bridgey - Bridging real world states into blockchains - use case is Car Congestion



Poor Planning, Information and Driving - Traffic Congestion

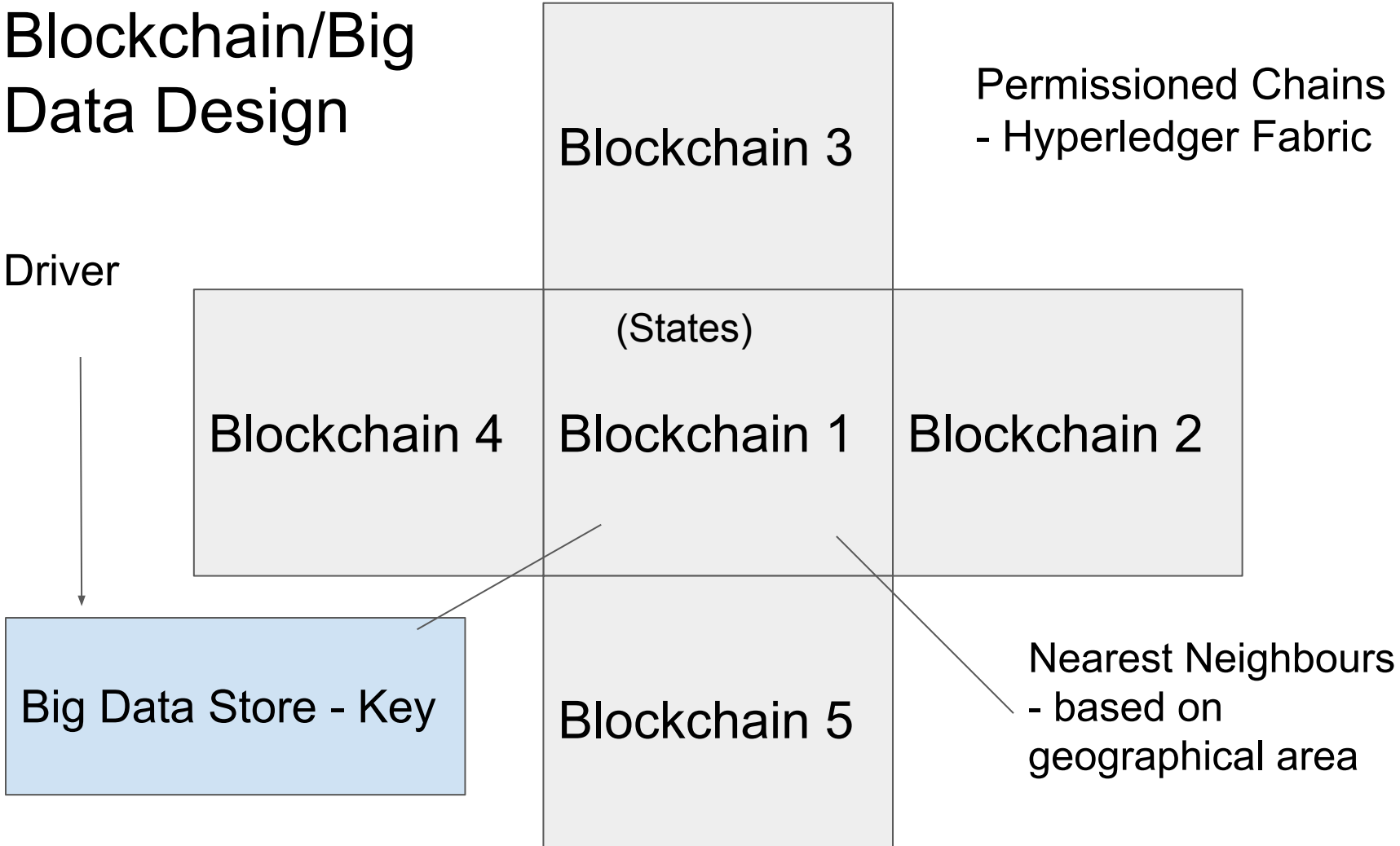
- Costs second only to food
- Billions hours lost
- Major killer
- Major Pollution
- Accidents
- Wasted Fuel
- Competitiveness Affected

https://www.geographyalltheway.com/igcse_geography/gcse-settlement/traffic_congestion.htm

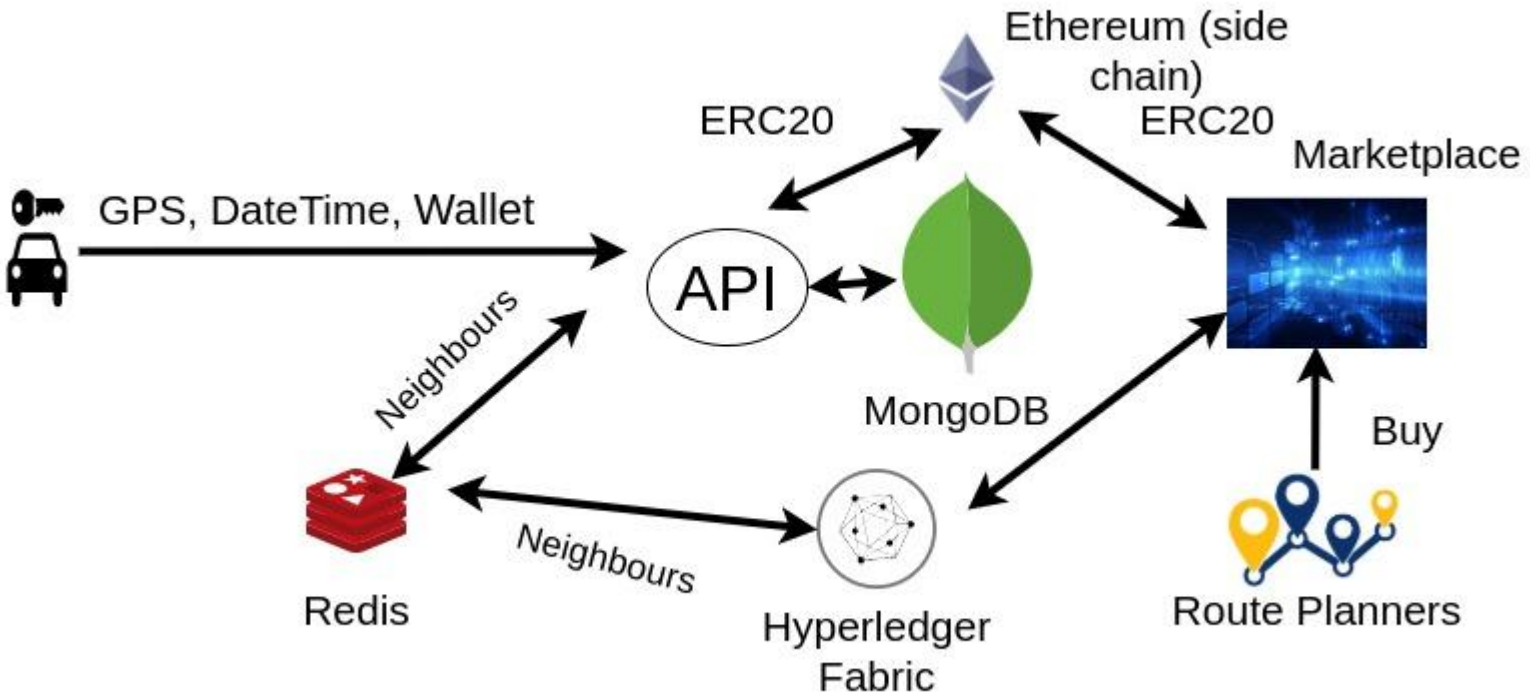
Solution - Smart Roads, Driver centric data, rewards for data, Blockchain Enabled

- Drivers Send GPS
- GPS Recorded on the blockchain
- Congestion Worked Out
- Data sold to Route Planners Apps
- Marketplace for Data
- Android phone to send
- Intelligent Traffic Signals & Roads

Blockchain/Big Data Design



Design - ERC20, Big Data, Permission Chains



Data from Testing

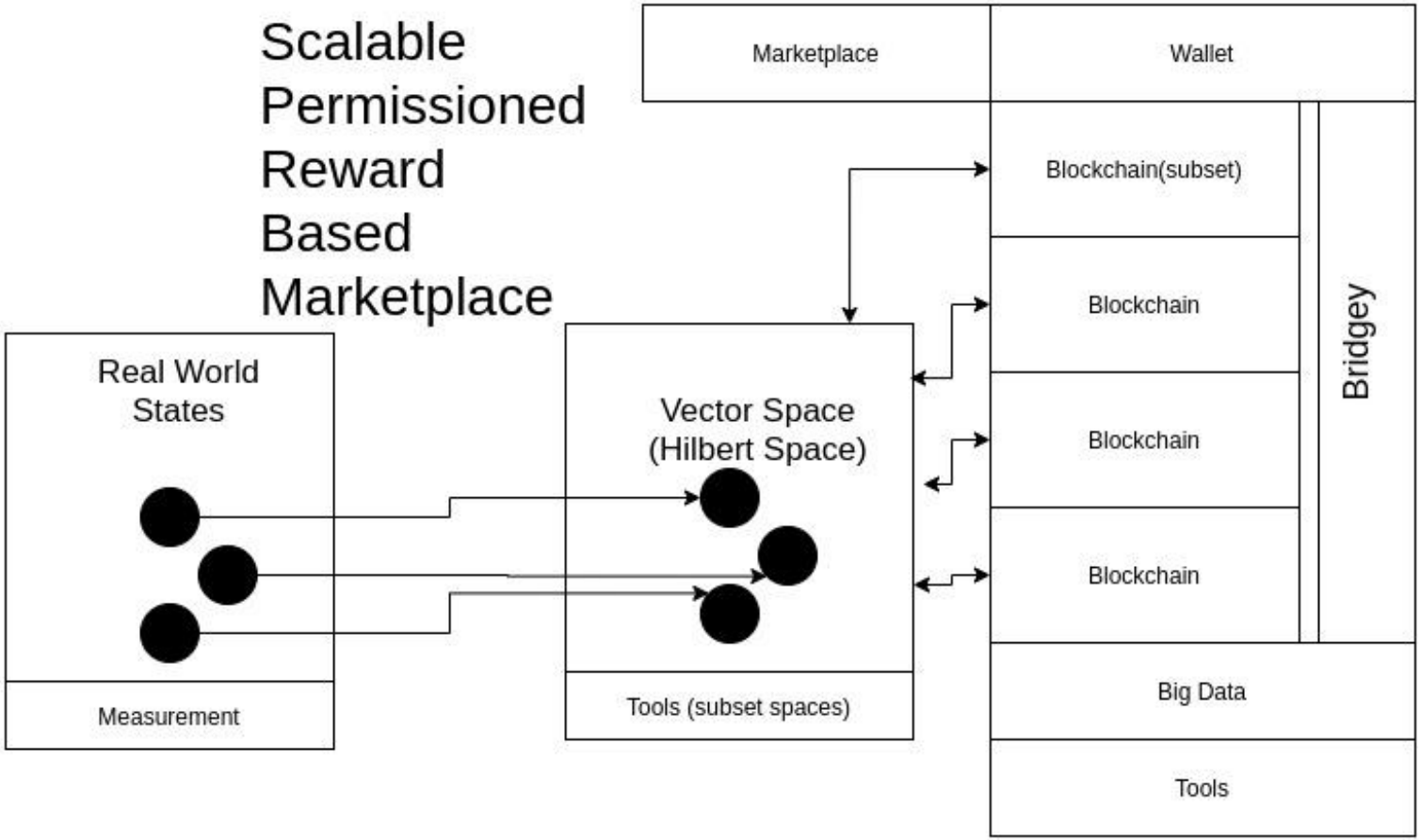
Fabric - {"Key":"5f825d86f2b0cd4cb825fcba","Record":{"docType":"gps","gpsdate":"2020-07-10T19:00:131Z","latitude":"39.198396","longitude":"-84.594523","userid":"228"}}

MongoDB - { "_id" : ObjectId("5f825d86f2b0cd4cb825fcba"), "Longitude" : -84.594523, "Latitude" : 39.198396, "UserID" : 228, "GPSDate" : "2020-07-10T19:00:131Z", "GPSSquare" : 2, "__v" : 0 }

GPSSquare - blockchain - based on area

Source Data - https://data.cincinnati-oh.gov/Efficient-Service-Delivery/Vehicle-GPS-Data-Department-of-Public-Services/b56d-ydmm

Extending Idea - Theory



Future IoT Use Cases

- Flying Cars (safety and management of flying)
- Intelligent Cars (fuel optimization & safety)
- Smart Buildings (insurance & security)
- Medical Data (research on illness and solutions)
- Walking (fitness and insurance for people)
- Food Tracing (food safety, consumer choice)
- Lifestyle Trackers (intelligent shopping)
- Public Transport (Operational Management)
- Security (Safety)
- Farming (commodities trade)

Team & Links

Trevor Lee Oakley - Blockchain Specialist

Github - https://github.com/zillerium/bridgey

https://www.youtube.com/watch?v=V01Z7G00Q3s&feature=youtu.be

Time - Work started Friday evening, ended Sunday - no prior work.

Summary

- Real world data mapped to vector states
- States formed subsets. Mapped to Chains
- Data stored in big data
- Permissioned data
- Rewards based
- Big Data Tools
- Scalable Solution
- Observes Privacy
- Marketplace Driven
- Usable for any IoT data or state data