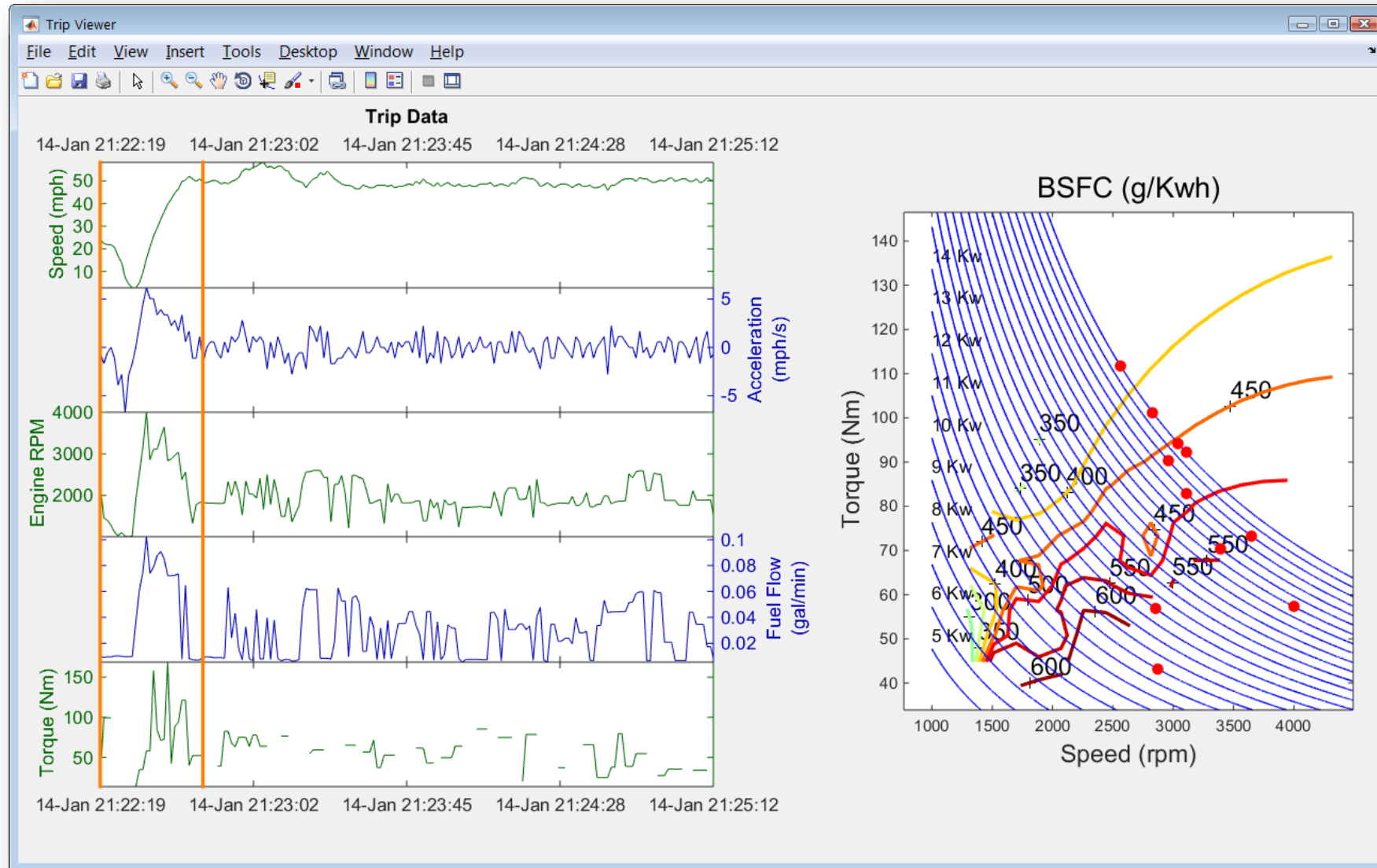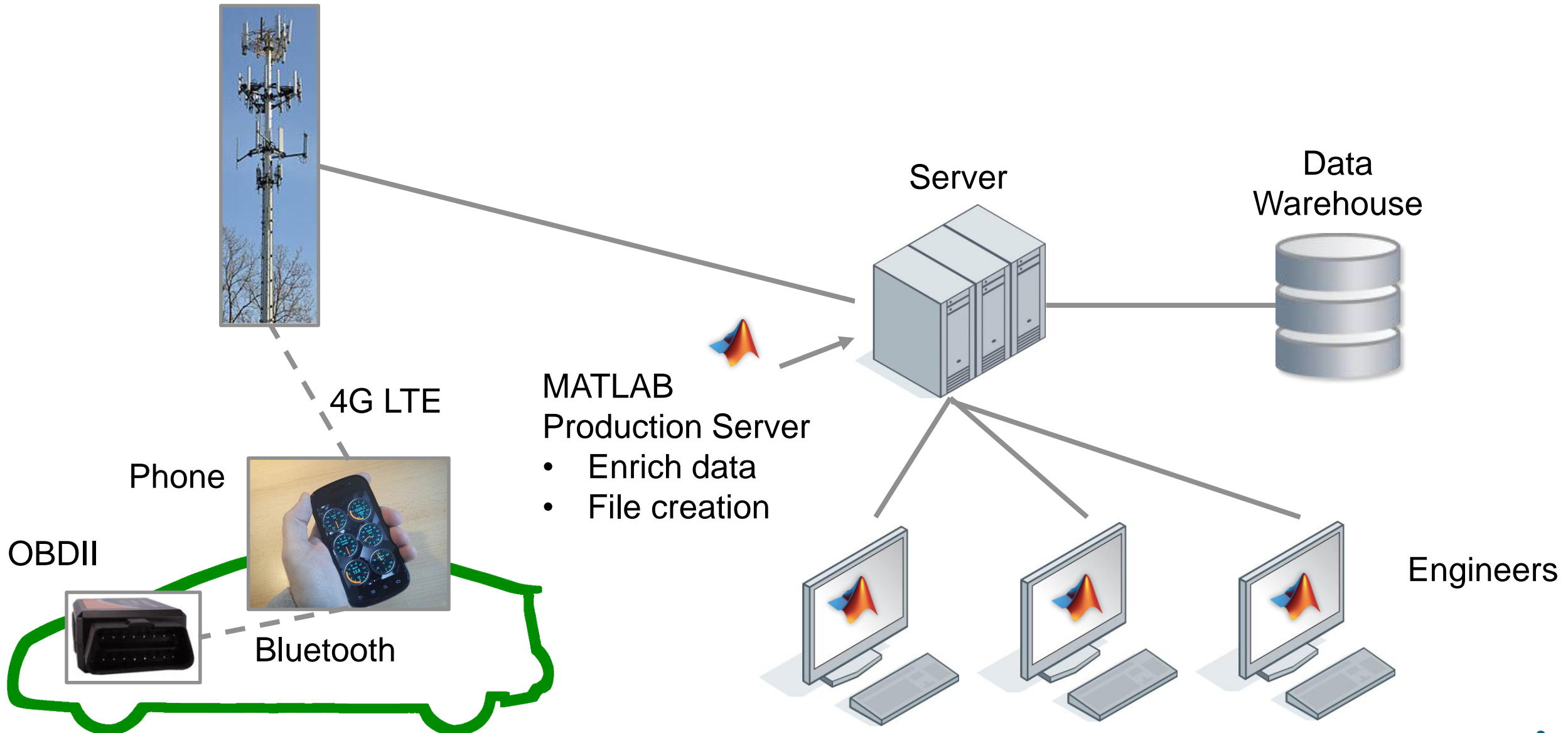# Analyzing Fleet Test Data using MATLAB

Seth DeLand

Analyzing Fleet Data
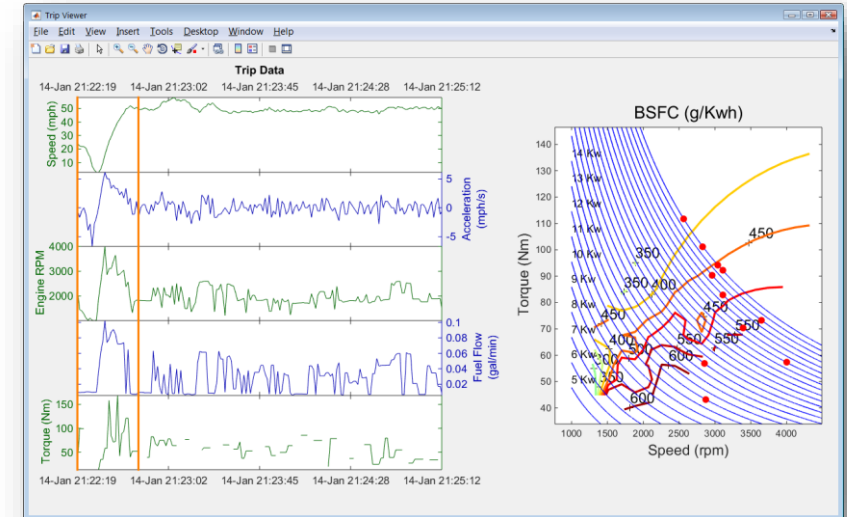
Example Setup at MathWorks

4G LTE

Phone

OBDII

Bluetooth

MATLAB
Production Server
- Enrich data
- File creation

Server

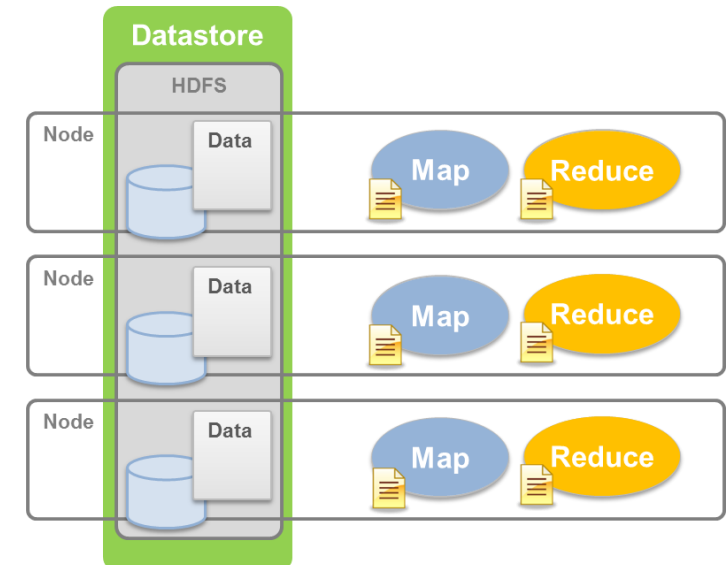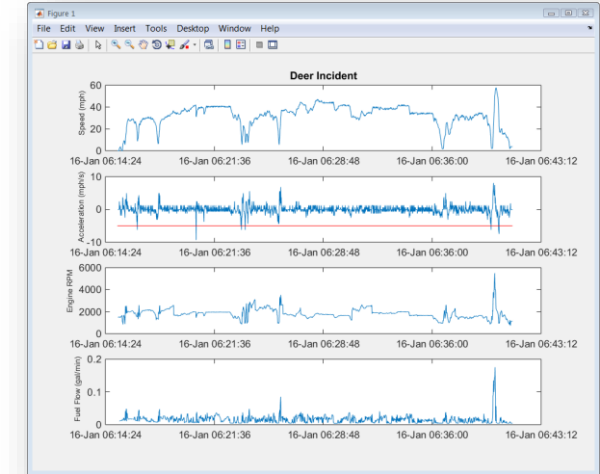Data Warehouse

Engineers

Analyzing Fleet Test Data

- 40 MB of data from fleet

- Visualize & explore

- Deploy an engineering interface

Event Detection

- Parse data, find sudden deceleration

- Map Reduce workflow
  - Serial on Desktop
  - Parallel on Desktop
  - Point to HDFS
  - Deploy to Hadoop

Cylinder Failure Detection

- Data logged from small aircraft engine

- Goal: Identify the bad cylinder

- Challenges:
  - Import data spread across several files
  - Identify best algorithm to detect failure