

OEM

Automotive



MANAGING A FLEET OF AUTONOMOUS VEHICLES WITH SIMULATION AND ALGORITHMS

OVERVIEW

- Designed and supported the development of prototype transport simulation and reinforcement learning algorithms used to manage a fleet of autonomous vehicles

APPROACH

- Tuned performance of and parallelized algorithms
- Increased speed and reduced cost of running simulations by more than 25x
- Set up and maintained a high-performance simulation platform on Amazon AWS
- Built dashboard to monitor and compare results of various simulation runs

KEY TECHNOLOGIES

- Java
- Python
- Tensorflow
- Amazon AWS (Amazon services such as EC2, ECR, S3, EMR, ParallelCluster)
- Docker
- Shell scripting
- Eclipse IDE
- MPI