Uber’s mission is to put the world in motion. Achieving that goal requires world-class engineers and a lot of data.

Background

Uber’s systems need to operate at a massive scale. Uber’s map storage engine currently serves data at a throughput of up to 1.3GiB per second but needs to be able to grow substantially.

Architecting data storage solutions at the scale required by Uber is a challenging feat of engineering and requires intelligent solutions and ingenuity.

Project Description

The goal of this project will be to design and implement a proof-of-concept for serving map data out of a two-tiered database.

The first tier (a persistence layer) will store data on disk, handle all writes, and act as a source of truth in the system. The second tier (a service layer), will be a horizontally scalable and in-memory solution that can service all reads in a fashion consistent from the persistence layer, but with significantly lower latency and a potential throughput increase of several orders of magnitude.

Requirements

We are looking for a team of 4 engineering students. Students should be confident programming in a variety of programming languages and should feel comfortable working in Linux.

Recommendations to our recruiting department are possible for students that show strong talent and a fierce determination to solve problems.