

CLOUD COMPUTING APPLICATIONS Cloud Computing Glue: HTTP2
Push, Streaming Video
Prof. Reza Farivar

## HTTP/2

- Published in 2015, most browsers supported it by the end of 2015
  - By 2020, about ~42% of top 10 million websites supported HTTP/2
- One of the main features of HTTP/2 is server push
  - Closely related to another feature of HTTP/2: data streaming
  - HTTP/2 Server push is being progressively implemented, for example Nginx web server implemented it in February 2018.
  - By now, all major servers and browsers support it
- It "proposed" new data in a new stream to the browser, to be stored in a Cache
- It does not send the pushed data directly to the client application itself
- To make the application aware, HTTP/2 utilizes Server-Side Events (SSE)

## **Amazon AWS API Gateway**

- REST API
- WebSocket API
- HTTP API
  - Based on HTTP/2 push and notification

## Video Streaming over the Internet

- Streaming Video Content
  - RTMP
    - Still very prevalent, but slowly being phased out
  - RTP (over UDP)
  - HLS (over HTTP)
  - MPEG-DASH
  - WebRTC