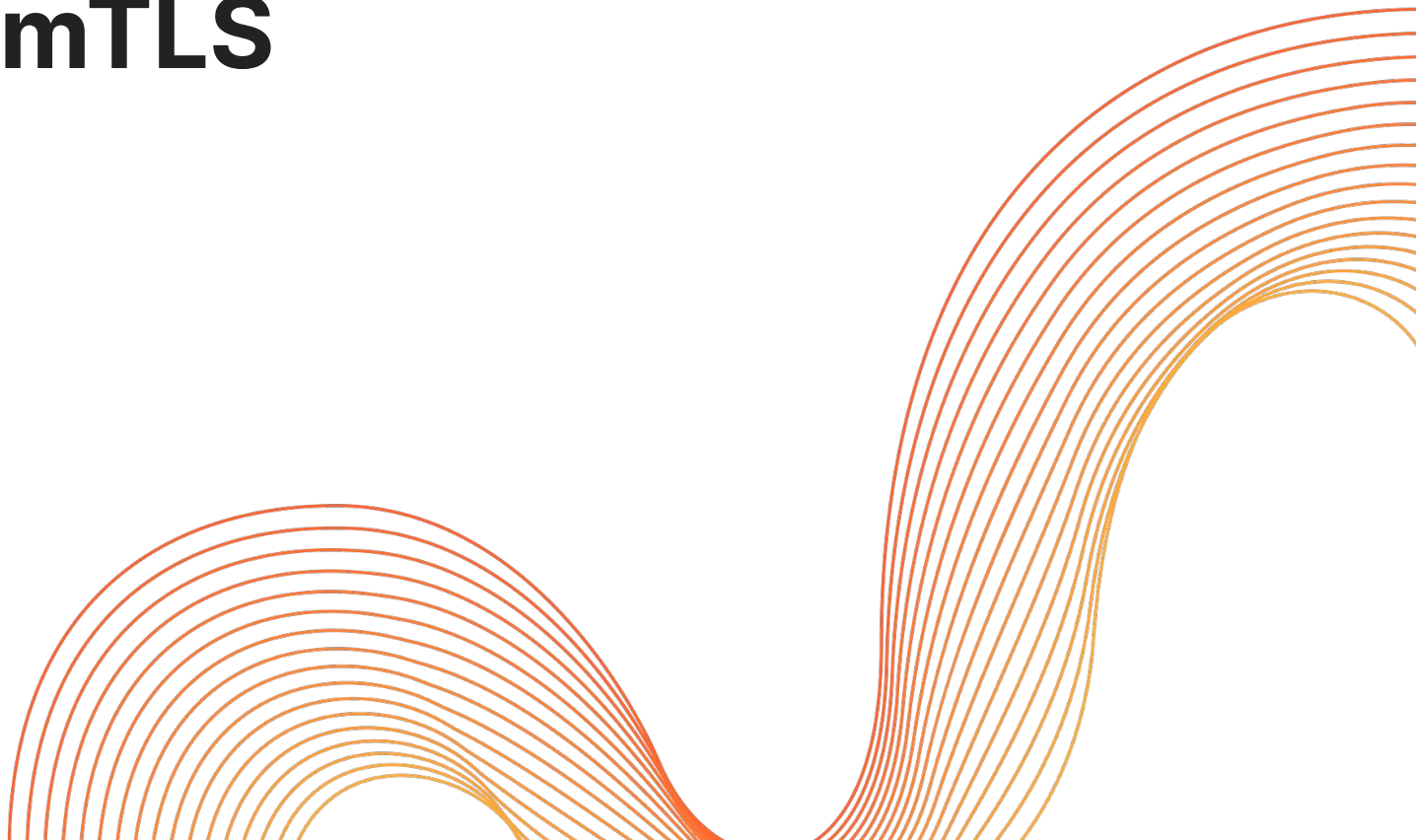
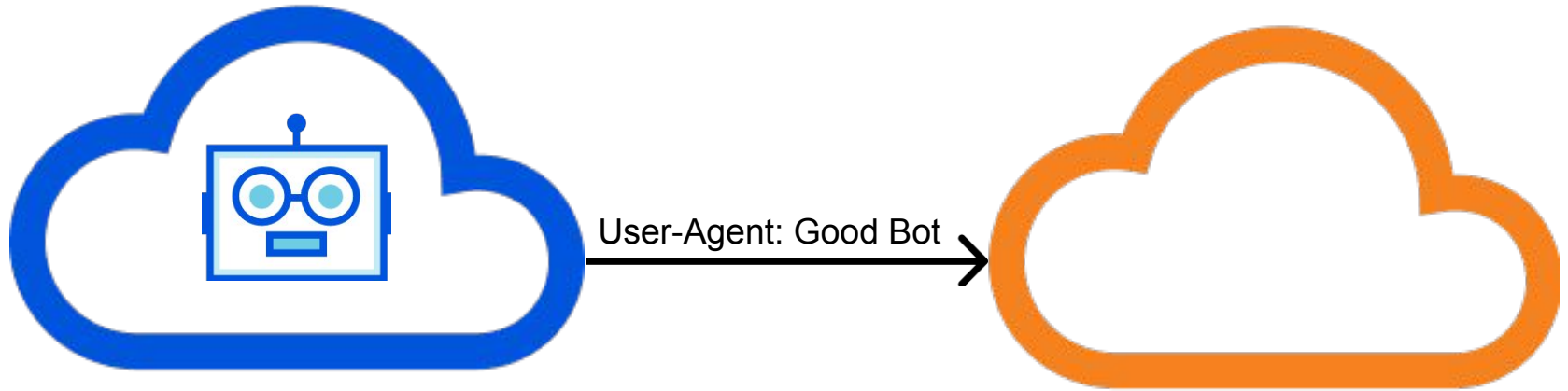

Request mTLS

Jonathan Hoyland

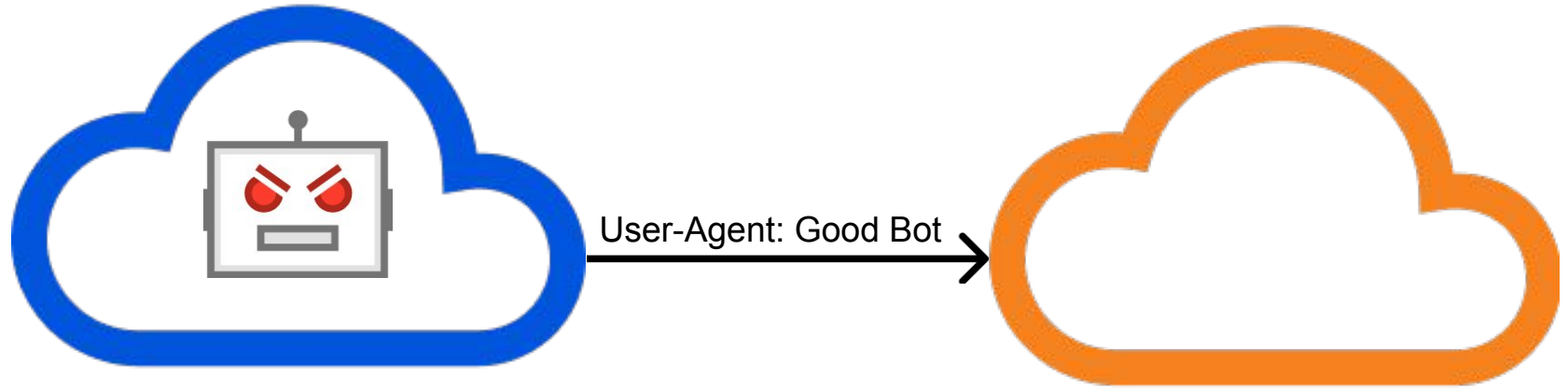


Distinguishing Bots is Hard



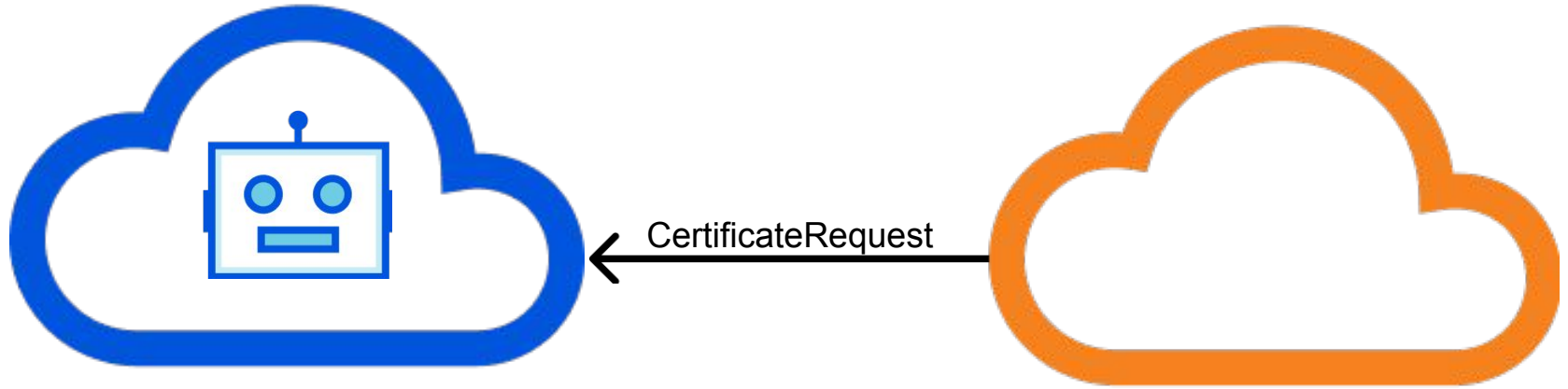
- Many bots come from public clouds
- Bots distinguish themselves by setting a special user agent

Distinguishing Bots is Hard



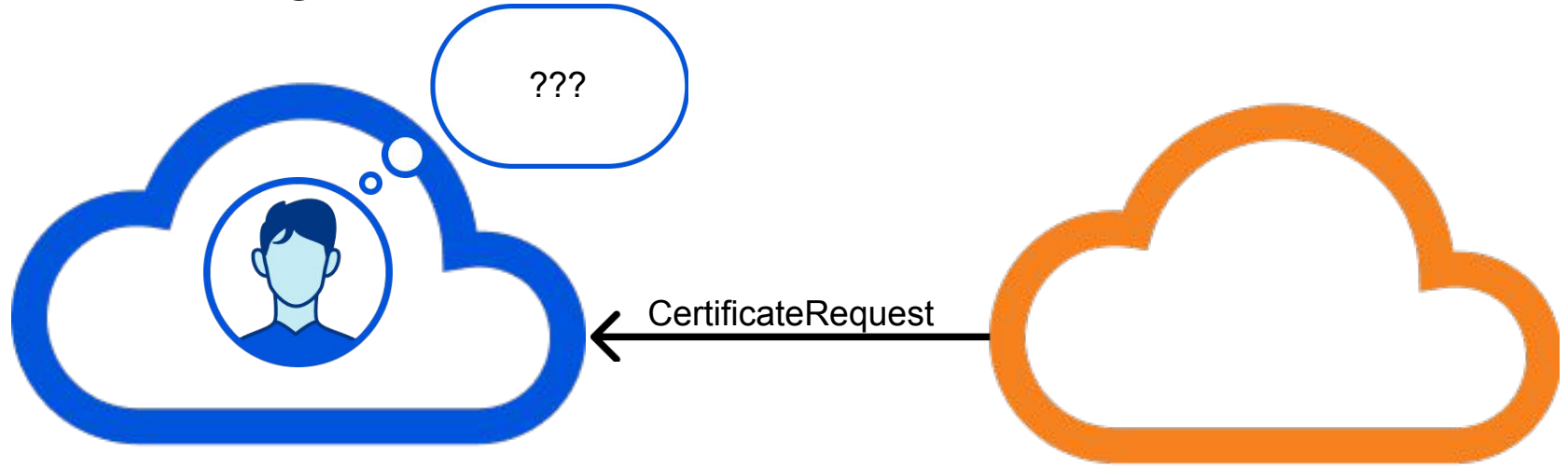
- Both these signals are easy to forge

CertificateRequest lets us Identify Bots



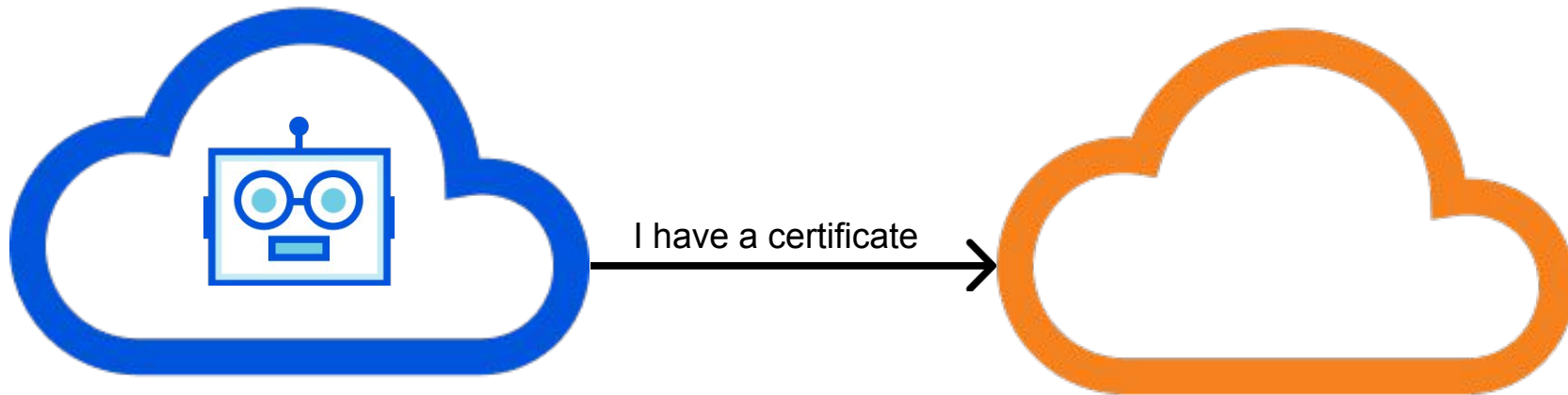
- Mutual TLS needs to be initiated by the server
- Post-handshake auth and Exported Authenticators add an extra RTT

But Humans might be confused



- If we incorrectly send a CertificateRequest to a human they probably won't know what to do

Request mTLS Flags



- Configure the client to send a hint when a client certificate is available
- TLS Flags is perfect for this

Questions?

- Do people think this is useful?
- Is there interest in working on this?