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"Real World Adventures at a Cryptocurrency Exchange"

Cryptocurrency exchanges offer challenges to even the most seasoned data scientists, security engineers and financial analysts. Everything from customer due diligence to predictive analytics to cybersecurity to illicit activity tracking requires both techniques and data that are unique to cryptocurrency and often hard to obtain. The ease by which dishonest exchanges can inflate trading volumes and the difficulty of obtaining approval for custody solutions presents hurdles when seeking formal regulatory approval. Advancements in Deep Fake videos and highly targeted phishing campaigns have tipped the scales in favor of attackers, keeping security teams constantly trying to stay one step ahead of adversaries and leaving enforcement bodies wondering about what precisely to collect in terms of forensic evidence. My talk will describe how a regulated cryptocurrency spot and futures exchange went from an idea to a fully regulated entity, the challenges we encountered along the way with regard to the design of custody and unique data analytics, and the open research challenges remaining.