Most existing blockchain protocols fail to meet several key enterprise requirements, including confidentiality, acceptable transaction throughput and latency, computational efficiency (e.g. energy costs for proof-of-work consensus), and effective governance. Coco Framework, an open-source system, enables any blockchain ledger that integrates with it to meet these needs. It does so by leveraging Trusted Execution Environments (TEEs) such as Intel’s Software Guard Extensions (SGX) to make a blockchain network that can use efficient consensus protocols and implement access control rules to protect blockchain state from being accessed by unauthorized parties, even ones that operate the nodes on which it runs. Mark will describe Coco Framework’s algorithms, as well as Microsoft’s broader research and development efforts in TEEs.