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## A Study of Blockchain Oracles

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**Abstract :** The limitation with smart contracts is that they cannot access external data that might be required to control the execution of business logic. Oracles can be used to provide external data to smart contracts. An oracle is an interface that delivers data from external data outside the blockchain to a smart contract to consume. Oracle can deliver different types of data depending on the industry and requirements. In this paper, we study and describe the widely used blockchain oracles. Then, we elaborate on his potential role, technical architecture, and design patterns. Finally, we discuss the human oracle and its key role in solving the truth problem by reaching a consensus about a certain inquiry and tasks.

Keywords: blockchain, oracles, oracles design, human oracles

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