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A Data Science Methodology for Internet-of-Things

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Abstract. The journey of data from the state of being valueless to valuable has been possible due to powerful analytics tools and processing platforms. Organizations have realized the potential of data, and they are looking far ahead from the traditional relational databases to unstructured as well as semi-structured data generated from heterogeneous sources. With the numerous devices and sensors surrounding our ecosystem, IoT has become a reality, and with the use of data science, IoT analytics has become a tremendous opportunity to perceive incredible insights. However, despite the various benefits of IoT analytics, organizations are apprehensive with the dark side of IoT such as security and privacy concerns. In this research, we discuss the opportunities and concerns of IoT analytics. Moreover, we propose a generic data science methodology for IoT data analytics named as Plan, Collect and Analytics for Internet-of-Things