Achieving Mission Impact with Data Science

John Piorkowski

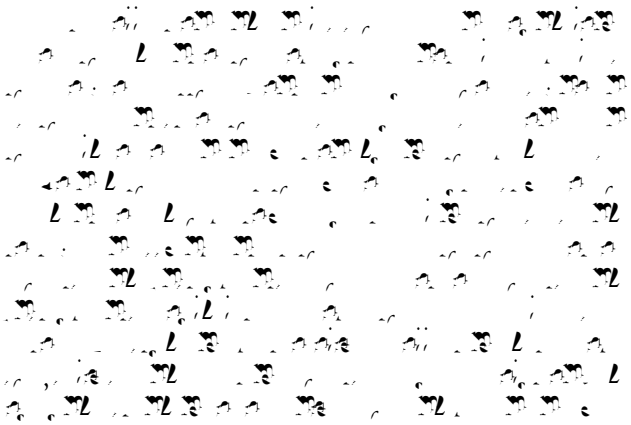
ABSTRACT

Data science emerged as a popular technical field by leveraging the advances in data storage, computing, and machine learning. Practical applications of data science are far-reaching and include marketing, fraud detection, logistics, crime prediction, social engagement, sports team management, and health care. Recognizing this profound impact, the Johns Hopkins University Applied Physics Laboratory (APL) Asymmetric Operations Sector (AOS) created the Data Science Initiative (DSI) to apply data science to national security challenges and health care. The DSI accelerated APL data science contributions to national security and health care by creating new research initiatives and establishing deep technical competencies that shaped and directed novel solutions across the AOS mission space.

INTRODUCTION

WHAT IS DATA SCIENCE?

The Beginnings of Data Science



P . 2017 IEEE 7 A . C . C - C ., CC C 2017

P . 12 A . C I . S . R . C . (CISRC 17)

P . 25 I . C . N I . P . S . (NIPS 2012)