Data Science: A review of case studies

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Twenty-five years in the field of data science. Some things have changed, some have not. Some use cases are innovative, some are always the same. I would like to talk with you about some of those use cases, the traditional ones and their historical solutions, sometimes neglected but still valid. I would also like to illustrate some of the most recent use cases, those that were impossible to solve twenty years ago and have found a new life in the modern era of data science. All in all, I would like to take you through a time ride and see what has changed, what has stayed the same, what is still a practical solution to the customer and what is an awe-inspiring dream. From a classic churn prediction, that everybody should know by now how to quickly implement, to a rap song generator via free text generation techniques; from an anomaly detector in the manufacturing industry to convolutional networks for image recognition; from the recommendation engines popular in the 00 years to reinforcement learning to teach a machine to play tic tac toe. While exploring these case studies, we will focus on the new technique, the trick, the new hardware that made the solution feasible.
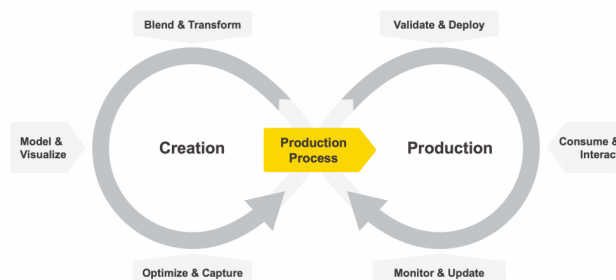
Biography

Rosaria Silipo, PhD, principal data scientist now at KNIME, has spent 25+ years in applied AI, predictive analytics and machine learning at Siemens, Viseca, Nuance Communications, and private consulting. Sharing her practical experience in a broad range of industries and deployments, including IoT, customer intelligence, financial services, social media, and cybersecurity, Rosaria has authored 50+ technical publications, including her recent books: "Guide to Intelligent Data Science" (Springer) and "Codeless Deep Learning with KNIME" (Packt).