**Publication Number:** US20230140553A1

**Title:** Evaluating effects of an artificial intelligence model on enterprise performance objectives

**Assignee:** International Business Machines Corp

**Application Date:** 2021-10-29

**Status:** Pending

**Summary:** The invention consists of a system, methods, and computer program products that monitor and evaluate the effects of an AI model on enterprise performance metrics. The system identifies technical issues with the AI model by correlating changes in performance metrics, using a data model that defines relationships between metrics and potential issues. The system can also suggest or implement solutions for these issues based on the data model, and subsequently measures the effect of these solutions on the performance metrics. This continuous learning process allows the system to update and refine the

**Publication Number:** US11457554B2

**Title:** Multi-dimension artificial intelligence agriculture advisor

**Assignee:** Kyndryl Inc

**Application Date:** 2019-10-29

**Status:** Active

**Summary:** The patent describes a method, system, and computer program product for an Artificial Intelligence (AI)-based agriculture advisor. It involves creating a user profile with data from the user and additional data from IoT devices and external resources. This data includes business, agricultural, weather, and global event information. The system prepares and transforms the data, conducts a hypothesis, and validates the transformed data. The AI model is trained on this data and regularly updated with new information. The system then matches the user data with the

**Publication Number:** US11727119B2

**Title:** Migration risk assessment, recommendation, and implementation

**Assignee:** International Business Machines Corp

**Application Date:** 2020-06-18

**Status:** Active

**Summary:** The patent outlines a method, system, and program for supporting a migration operation. It uses machine learning models to identify and categorize risk factors associated with the migration operation into mandatory and non-mandatory specifications. These risk factors are assessed independently, with weight values assigned to each. The method recommends remediation actions to lower the migration operation's risk, which are implemented before the operation. A migration plan incorporating these actions is then generated. The method also predicts the migration plan's outcome. The system includes a

**Publication Number:** US10963231B1

**Title:** Using artificial intelligence to select and chain models for robotic process automation

**Assignee:** UiPath Inc

**Application Date:** 2019-12-09

**Status:** Active

**Summary:** The invention pertains to a computer-implemented method that uses artificial intelligence (AI) to improve the performance of machine learning (ML) models used in robotic process automation (RPA). This is achieved by executing a "model of models" that analyzes and compares the performance of individual ML models and chains of ML models. When a superior performing model is found, it is deployed and replaces the existing model, and the workflow of the RPA robot is modified accordingly. The method also includes generating and deploying

**Publication Number:** US11367008B2

**Title:** Artificial intelligence techniques for improving efficiency

**Assignee:** Cognitive Ops Inc

**Application Date:** 2020-05-01

**Status:** Active

**Summary:** The invention is a method of automated validation of financial reports. It involves receiving unstructured process input data associated with financial data categories and transforming it into indexed, searchable structured data using process mining techniques. An end-to-end process model and digital representation of the process are generated, from which automation candidates are determined. Automation tools, trained to apply financial domain labels to structured input data, are then configured. Following a structured query based on a financial report, the system identifies relevant financial domain labels and validates the report

**Publication Number:** US11816244B2

**Title:** Machine learning methods and systems for protection and redaction of privacy information

**Assignee:** Cognitive Ops Inc

**Application Date:** 2021-10-11

**Status:** Active

**Summary:** These claims and the abstract detail a computer-implemented method, system, and product for evaluating and handling privacy information in electronic documents. The method uses machine learning models to assess documents and build a content profile. It identifies different content portions indicative of pre-defined categories, including potentially sensitive information such as financial data or biometric content. The system then uses the machine learning models to estimate the likelihood that these content portions contain privacy information. Based on this evaluation, the system recreates the electronic documents with the privacy

**Publication Number:** US20220318577A1

**Title:** Systems and methods for deriving leading indicators of economic activity using predictive analytics

**Assignee:** Individual

**Application Date:** 2022-06-14

**Status:** Pending

**Summary:** This patent describes a predictive analytics system that makes use of various data sources to forecast economic activity. The system uses multiple datasets, including sensor data from direct observation of activities in an environment, to train machine learning models. These models are evaluated based on assigned statistical metrics and the most accurate are selected. The system also includes a hypothesis generating and testing system that helps in creating these models. The system can provide subscribers with model information and output data, including leading indicators of economic activity. The system is capable of

**Publication Number:** US20230342392A1

**Title:** Generative ai systems and methods for economic analytics and forecasting

**Assignee:** Individual

**Application Date:** 2023-06-27

**Status:** Pending

**Summary:** The patent describes a generative artificial intelligence (AI) system designed to perform economic analytics and forecasting. This system utilizes various data sources that may include sensor data, associating it with different sectors like agriculture, aquaculture, transportation, and more. The system generates a hypothesis object, trains a machine learning model to create experimental results, and stores these in a context-aware AI or probationary database based on the model's performance. The system also includes additional modules such as natural language processing, visual analytics

**Publication Number:** US11983609B2

**Title:** Dual machine learning pipelines for transforming data and optimizing data transformation

**Assignee:** Sony Interactive Entertainment LLC

**Application Date:** 2019-07-10

**Status:** Active

**Summary:** The patent claims and abstract detail an apparatus and method to enhance the gaming experience using machine learning. The system involves two data pipelines. The first pipeline processes raw data into model features and subsequently into machine learning models, conducting training, inference, and experimentation of these models to personalize game experiences. The second pipeline improves upon the models generated by the first pipeline, using a reinforcement learning model and an evolution strategy model. These models identify the best performing models and inform the training of new models in the first pipeline.

**Publication Number:** US20230123231A1

**Title:** Systems and methods for enterprise data analysis and forecasting

**Assignee:** Data Cube Inc

**Application Date:** 2021-10-19

**Status:** Abandoned

**Summary:** The claims and abstract detail a system for enterprise data analysis and forecasting. The system includes user computing devices, an application server, and a machine learning engine. The application server hosts an application program that provides a user interface module for access. The machine learning engine processes data points from databases and sends them to a report module, which generates reports. These reports allow users to analyze and forecast enterprise data. The system also includes databases for sales, marketing, reports, technical support, and reviews, which the machine

**Publication Number:** US20230245008A1

**Title:** System and method for using artificial intelligence and machine learning to streamline a function

**Assignee:** Picsello Inc

**Application Date:** 2021-05-25

**Status:** Pending

**Summary:** The patent describes a system and method for streamlining a business function using artificial intelligence and machine learning models. The system receives data related to a business function and generates recommendations using AI and machine learning. After outputting these recommendations, it receives response data based on the selected recommendations to generate a second, different business function. This process can result in financial changes for the business. The system can also adjust events such as meetings based on the response data. The method can cater to preferences and characteristics of products or

**Publication Number:** US11410111B1

**Title:** Generating predicted values based on data analysis using machine learning

**Assignee:** Wells Fargo Bank NA

**Application Date:** 2018-08-08

**Status:** Active

**Summary:** The disclosed method and system use machine learning algorithms to predict a business metric for an enterprise. The algorithms are trained on financial data from other businesses, which include metrics like corporate liquidity, market capitalization, and revenue. The system selects a training and test data subset from the dataset, generates candidate models, and cross-validates them to assess their predictive skill. Based on this, a model is selected to predict the corporate liquidity value for a new business entity. The predicted values are displayed in a user interface

**Publication Number:** US20220027793A1

**Title:** Dedicated artificial intelligence system

**Assignee:** Unionplace Co Ltd

**Application Date:** 2021-10-08

**Status:** Pending

**Summary:** The patent describes a dedicated artificial intelligence (AI) system for enterprise business processes. The AI system is connected to a computer system and includes a communication interface and an operation processor. It functions by receiving input information, generating output information, and creating external queries based on the input. These queries are sent to other AI systems, and their responses are compared to generate a final output. The AI model can be trained based on these outputs and responses. The system also includes provisions for handling sensitive information, assessing the

**Publication Number:** US9576262B2

**Title:** Self learning adaptive modeling system

**Assignee:** Microsoft Technology Licensing LLC

**Application Date:** 2012-12-05

**Status:** Active

**Summary:** The patent outlines a method and system for predictive analytics using self-learning and adaptive modeling. It constructs a hierarchical model with multiple predictive models across varying levels of granularity. These models are trained based on accumulated data and evaluated for their performance. The model that performs the best at a more specific level of granularity than its parent model is activated for making predictions. The system can also predict the probability of an outcome, such as a fraudulent transaction. The models are automatically retrained at regular intervals and best models can change

**Publication Number:** US20210374866A1

**Title:** Integrated Database Systems with Intelligent Methods and Guidance for Financial Margin Expansion

**Assignee:** Margin Expansion Solutions LLC

**Application Date:** 2021-05-21

**Status:** Abandoned

**Summary:** The integrated database system provides a margin expansion solution by automating data extraction, analysis, and reporting. The system includes a client and host computer, an enterprise database storing business data, and a margin expansion solutions (MES) database for ongoing initiatives information. Financial and operational data extracted from the enterprise database is automatically analyzed by an analytics module, and a reports module then provides user reports and dashboards. The system can transition from a manual to an automated process via artificial intelligence and predictive machine learning, using MES

**Publication Number:** US20210065305A1

**Title:** Method and apparatus for processing data using artificial intelligence to determine goals

**Assignee:** Forwardlane Inc

**Application Date:** 2020-08-26

**Status:** Abandoned

**Summary:** The patent involves a method, apparatus, and system for determining financial or business goals using artificial intelligence (AI). The method involves collecting and processing unstructured data from various sources related to a user to identify their goal and relevant contextual data. This contextual data is then classified into two levels of confidence, with the lower confidence data integrated with structured data. The results are presented via a graphical user interface. The apparatus and system follow the same logic, with the addition of a business rule engine, a rating system

**Publication Number:** US20200294073A1

**Title:** Platform for In-Memory Analysis of Network Data Applied to Logistics For Best Facility Recommendations with Current Market Information

**Assignee:** Applied Methods Inc

**Application Date:** 2020-03-11

**Status:** Abandoned

**Summary:** The system and method presented in the claims apply in-memory analysis of network data to provide optimal facility recommendations for logistics, using current market information. The system comprises multiple data extractors, a controller application programming interface, various modules including data harmonization, descriptive, predictive, feature selection, and spatial segmentation modules, a scheduler, a delivery API, and a visualization tool. The system integrates internal product data with external market data, identifies market features related to freight costs, forecasts spot market rates, and determines the

**Publication Number:** US20230011954A1

**Title:** Device, method, and system for business plan management

**Assignee:** Hitachi Ltd

**Application Date:** 2022-07-11

**Status:** Pending

**Summary:** The patent claims a business plan generation device and method that uses machine learning to create and revise business plans to achieve targeted outcomes. It defines a business plan, acquires business state information including internal and competitive data, and generates revised business plans. The device also uses web-scraping techniques to acquire competitive information, identifies patterns in business state evolution, and forecasts potential business impacts. The generated plans are then ranked based on the degree to which they achieve the targeted outcomes. The system also includes a client terminal

**Publication Number:** US11223546B2

**Title:** Method, apparatus and system for real-time optimization of computer-implemented application operations using machine learning techniques

**Assignee:** Cisco Technology Inc

**Application Date:** 2020-08-22

**Status:** Active

**Summary:** The patent describes a computer-implemented method, system, and computer program product for real-time optimization of applications hosted in a remote networked environment. The system uses machine learning techniques to automatically identify, measure, and update application settings for optimized operation. The optimization process involves generating measurement information, calculating scores, determining updated settings, deploying these settings, and computing rewards to update the optimizer algorithms. The process is carried out iteratively for multiple applications and multiple runtime configurations. The system also allows the selection of different

**Publication Number:** US20210216911A1

**Title:** Systems and methods associated with multi data type multi data set artificial intelligence packages, machine learning packages and mathematical systems

**Assignee:** Applied Artificial Sciences LLC

**Application Date:** 2020-12-21

**Status:** Pending

**Summary:** The patent claims pertain to a three-tiered modular system designed to interpret, understand, and optimize structured client case data, such as sales data. This system uses artificial intelligence (AI), machine learning algorithms, and mathematical formulas to generate predictions, categorizations, and optimizations. It provides training recommendations for clients related to data set maintenance and retention, along with predictive data sets. The system is structured so that each tier has limited access and secure communication with other tiers, minimizing the need for cross-field training