

Top 5 Artificial Intelligence Concepts



You are in the Right Place



Learning Objectives

- How to explain your AI process and results to regulators
- How to embrace AI without being replaced by it
- What are the best and easiest ways to train the machine
- Which projects to solve with AI
- How to target less false positives and more true positives
- Reinforcement quiz
- Bonus: How to manage a data science project
- Bonus: Hot to continually improve AI Models
- Call to action





Question

How to explain your AI process and results to regulators

Answers



Explainability is like a bicycle helmet. You don't need it but crashes hurt less.

- Show your work, not just the answer
- Provide a picture of the the typical thing you are looking for
- Visually compare what you found to what you are looking for
- Use explainability and interpretability algorithms
- Create an AI platform to explain multiple problems





Question	How to embrace AI without being replaced by it
	Santiago 🤣
•	
Answers	AI will not replace you. A person using AI will.
	8:00 AM · Jan 5, 2023 · 3.5M Views
	6,364 Retweets 684 Quotes 39.8K Likes
	 Al augmented analysts are more productive Add to your responsibility Solve more complex problems Move from sampling based to alert based systems Inspect the results and approve the decisions





Question	What are the best and easiest ways to train the machine
Answers	 Anomaly detection with unsupervised learning – no labels Leverage already labelled data Use pre-trained models Upgrade high volume rules based systems Start with all the main features, not a subset Start with Random Forest





Question	Which projects to solve with AI	
Answers	 Projects which cannot be solved with m Projects where all the data and process Automated approvals and workflows Noise reduction Time consuming reading Classification, Recommendation, Scori Challenging pattern interpretation 	ses are in the system





Question	How to target less false positives and more true positives				
Answers	 Understand the confusion matrix 			Actual Values	
	Prefer I ow stakes noise reduction to			Positive	Negative
	Prefer Low stakes noise reduction to high stakes problem identification.	Positive Bredicted Values	Positive	True Positive	False Positive
	 Tune hyper parameters 		False Negative	True Negative	
	 Balance Accuracy vs. F1 Score 		Negative	Taise Negative	nue negative





Reinforcement Learning





Bonus Question	How to manage a data science project
Answers	 Democratize the data Don't cut corners on data or compute Integrate data scientists with engineering and business teams Hire multiple data scientists Reward for going the last mile production KPIs Keep an eye on motivations Quadruple year-one estimates





Bonus Question	How to continually improve AI Models	
Answers	 KPIs and Confusion Matrix Explainability & Hyper Parameters Track model performance and drift Reinforcement learning More balanced training data More Features 	





Call to Action: List three AI points that will you apply



linkedin.com/in/JamesMassa