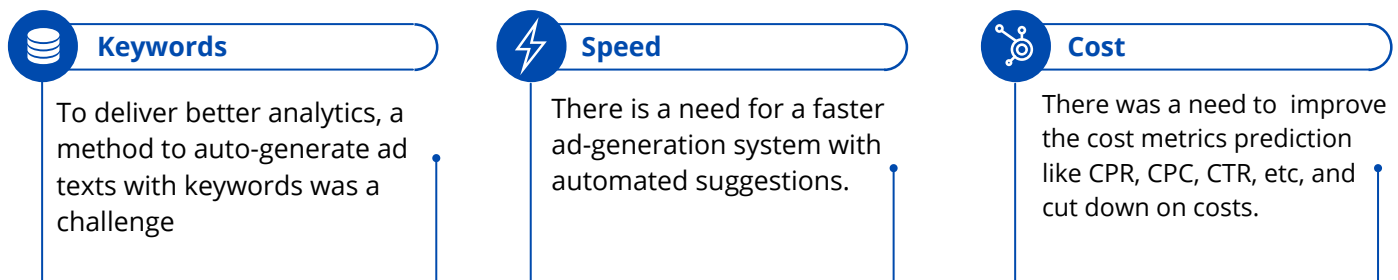# algoscale

DEEP-LEARNING BASED PERSONALIZED ADS GENERATION

Learn how **Algoscale** created a 360-degree solution to generate keyword-enabled text for the advertisement body and headline and improved metrics in the ad creation process

Industry Challenges

AI-driven algorithms are helping businesses to analyze the existing ads and videos to discover new patterns of customer preference and automate the content to generate more targeted advertisements, which the traditional systems lack in context. AI-powered solutions outperform traditional CRMs in multiple ways by assessing current textual and visual features such as photos, videos, body text, and headlines.

Keywords
To deliver better analytics, a method to auto-generate ad texts with keywords was a challenge

Speed
There is a need for a faster ad-generation system with automated suggestions.

Cost
There was a need to improve the cost metrics prediction like CPR, CPC, CTR, etc, and cut down on costs.

Problem Statement

Create a solution that would save marketers time and money by generating personalized ad copy and media, which could be launched straight to social media.

Our Solution

- To analyze the ads and obtain the desired insights, we used the Shapley Additive explanations (SHAP) model.
- We employed the Random Forest Regressor to forecast the cost metrics for various images, videos, body text, and headlines.
- In order to generate unique text that could be used by the client for the ads, we used Generative Adversarial Network (GAN)
- The solution enabled the platform to generate keyword-enabled text for the advertisement body and headline, which not only identified important features and patterns but also provided better metrics for targeting the ads.

Technology

Analyzed the ads to obtain the desired insights, using the SHAP model.

Used Random Forest Regressor to forecast the cost metrics for various images, videos, body text, and headlines.

Generated unique text that could be used by the client for the ads, using GAN

Enabled the platform to generate keyword-enabled text which provided better metrics for targeting the ads

Tech Stack

Business Impact

- We were able to scale the company by driving more conversions for their ads at lower costs, resulting in higher profits.

- With the assistance of AI, the ads were tailored to each audience segment in order to reach a large number of people.

- Our client observed up to a 3x boost in the ROAS.

Case Study: Deep-learning based Personalized Ads Generation

Client

A US-based agency that creates customized brand experiences for every customer with an AI and ML-based advertising platform. The platform analyzes the design preferences of all their target audiences to recommend posts, ads, and landing pages, thereby driving a higher probability and user engagement.

Challenge

The client was looking for a solution that would save marketers time and money by generating personalized ad copy and media. They needed a way to automatically generate ad texts with keywords in order to improve metrics, save money, and speed up the ad creation process.

Our solution

Our 360-degree solution enabled the platform to generate keyword-enabled text for the advertisement body and headline, which not only recognized relevant features and patterns but also gave improved metrics for targeting the advertising.

Business Impact

By better targeting and analysis of key audience segments, our client's ROAS increased by up to 3x and more conversions were achieved for their ads. Our solution improved the suggestion and cost metrics.