



Machine Learning Case Study

Optimizing Ad Serving with Machine Learning for cost, performance and quality improvements

**VIDCOIN**

About Vidcoin

Vidcoin is an Ad serving technology optimized for user experience, integrated in over 450 mobile and web applications. They serve more than 1 billion ad requests every day to millions of users with a minimal latency. Vidcoin embraces the Cloud-First spirit by being 100% hosted on AWS and using over 50 services to create a cutting-edge technology solution.

The challenge

Nowadays Ad Tech companies have to handle huge traffic volumes to deliver Ads. Vidcoin focuses on high quality Ads by controlling traffic and bidding on partner programmatic platforms. This strategy reduces the payout per Ad request and therefore limits the revenues of the company. Learning user behaviors and optimizing traffic quickly became inevitable so Vidcoin gathered a R&D team to build Machine Learning algorithms.

The solution

User data has to be processed by using an Amazon EMR cluster, running every month and processing tens of billions of user events. Amazon S3 is the primary choice for storing raw data (hundreds of terabytes). An Amazon EC2 instance, packaged with Machine Learning libraries, uses the monthly generated dataset to update the currently trained model and prepare a blacklist, that is loaded in Amazon DynamoDB for high traffic reads.

The benefits

**Benefit 1**

The ML algorithm detects and filters **60%** of total traffic being not relevant. The R&D team continuously improves its accuracy.

**Benefit 2**

AWS infrastructure costs are reduced by **45%**. The company is reinvesting this money into new services and quality improvements.

**Benefit 3**

Ads get rendered **7x** more often, meaning users have a better experience while watching ads in mobile applications.

**Benefit 4**

Higher Ad partner **trust** and Ad revenues. A direct impact is a visible growth in partner integrations and market visibility.

About Corexpert and AWS

Our expertise goes from high-tech Cloud architecture design to Cloud environment management. We put all our efforts into providing the most secure, scalable and highly available services to our clients, using AWS. We provide AWS Certified Architects, specialists of designing and maintaining strategic solutions, for your needs in architecture and Cloud development, so you can focus on your clients and your business.

Next steps

To learn more about how AWS and Corexpert can help your business, visit www.corexpert.net