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ForePaaS



The annual listing of 10 companies that are at the forefront of providing
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ForePaaS

All in One Cloud Platform for Streamlining Machine Learning and Analytics

The spheres of Machine Learning (ML) and analytics are evolving rapidly, although painfully. For example, in the case of ML, model construction and production entail the complicated use of disjointed tools, making it harder for data scientists and engineers to work efficiently, especially when their projects involve large amounts of data and the collaboration of several personnel. Post model creation, the herculean task of productizing begins where the hassle around cloud deployment follows. This is where ForePaaS comes to the picture, streamlining and unifying ML and analytics production and productization.

In an interview with CIO applications, Paul Sinai, Co-founder, CEO, and CTO of ForePaaS, shares insights on how their multifunctional platform helps create and operationalize scalable ML and analytics.

Could you walk us through the existing pain points or the challenges your clients face in building ML and analytics projects?

There is still a large majority of data science projects that don't make it to production. Operationalization, which includes industrialization of the data processing pipeline, data science model management and monitoring, and scalability - not only vertical but also over time, is still a big pain point.

Most companies struggle to go from pilot to industrialization. Even if they do, it takes months to build and productize, and they often run over budget. That's because building data science or analytics applications is a complex undertaking, and deploying and scaling them requires large teams and becomes expensive.

In a nutshell, the process looks like this: First, the business users write up or have a hunch about their analytics or machine learning requirements. The data engineers then build the data infrastructure that the data analysts or data scientists will use. Once the data analysts, and the data scientists (after running different models) they feel that they've found meaningful insight, they go back to the data engineers and IT, and the ML Ops Engineers in the case of machine learning, for production. The models and scripts are developed on a local environment and are not ready to be scaled on the cloud.



PAUL SINAI,
Co-FOUNDER, CEO & CTO

This is where most projects fail: the engineers often lack the infrastructure for productization, IT has other priorities to deal with, and a team of full-stack developers needs to be added to the equation to make the insight readily available to the business. The organization realizes that they need to spend additional funds on a project that has already taken months to build and produced little results.

As such, a streamlined platform and collaboration, which are crucial for the success of any data project, are often not there. Also, the data collection, cleaning, preparation, storing, and analysis tools used for building the projects don't necessarily help productize them. Additional cloud management, security controls, scalability, and high availability concerns must be dealt with. In this regard, the ForePaaS Platform bridges these gaps with a scalable, multi-featured platform for not only building but also productizing complex data projects on any cloud.

Please shed some light on the unique feature sets of ForePaaS that help your clients overcome these challenges?

We cracked the code to make the journey towards successful data science and analytics painless. With this in mind, we designed the ForePaaS Platform as an end-to-end cloud-native platform. All the tools you need are available in a unified platform where the whole team can collaborate and establish repeatable and scalable projects. It also automates a lot of the tedious data collection, cleaning, and preparation steps, to speed up the building and the production.

From the get-go, data projects are cloud-native. The ForePaaS Platform allows users to select their cloud provider of choice, import their data, and store it in a scalable cloud data store. They can re-use any part of the data and machine learning pipelines any number of times to re-validate a model, for example, or for other data projects. That is why data science projects with ForePaaS are living entities that you can modify over time as external market factors and business needs change.

Could you please share with us in detail how the ForePaaS Platform operates?

When first-time users log into the ForePaaS Platform, they are asked to choose a cloud provider like AWS, Microsoft Azure, Google Cloud, or OVH, for example, and a cloud data store to build their new ML project. A full-fledged cloud environment is then set up automatically, in less than 3 minutes, without using any of the cloud vendor's lock-in tools or account setting procedures. Once set up, they can access all the tools they need to build their data pipeline and ML pipeline through our hand-guided visual interface.

For a typical ML project, a data engineer usually connects data sources and builds the ELT or ETL (Extraction Transformation and Loading) rules and the data model. Unlike other platforms that are not as highly automated and lack collaboration, with the ForePaaS Platform, MLOps Engineers are not needed. Data scientists can pick their data sets and start building, training, scoring, and validating their model, right away. They can even deploy them with just a couple of clicks without having to go back to IT.

In essence, our platform is production-grade-ready. It has all the security management, cloud resource management, and monitoring functionalities needed to go from pilot to industrialization.

What differentiates ForePaaS from the competitors, and what does your client onboarding process look like?

Our key differentiator is that organizations can create and operationalize their data projects using just one platform without worrying about integrating multiple tools and making uncertain technological decisions and being locked into one cloud provider.

Deployment is instantaneous. Your machine learning and analytics will thrive on any public or private cloud. We focused on

building and automating the infrastructure, so organizations can focus on creating value.

Our partners to help clients through their data project. Clients can also seek assistance directly from our experts any point during their project.

For example, our partner, the Mitsubishi Research Institute, Inc. (MRI), delivers data-driven solutions over the Japanese regional cloud with the ForePaaS Platform. They've been offering one-stop-shop data cloud services to their clients since 2021.

Our mission is to make the journey towards a successful data science or analytics project as painless as possible

Would you like to share with us a few use cases and the upcoming plans for ForePaaS in the next 12 to 18 months?

Our customers have built incredible solutions, spanning many use-cases from churn prediction and customer insight to fraud detection, predictive maintenance, IoT management, and energy intelligence.

For example, a large shopping mall company is increasing footfall (the number of people entering their shopping malls) across its 105 shopping malls. This is incredible given the decline we've recently seen across shopping malls and the growing competition from online shopping sites. They've integrated 21 different data sources and built their first solution in just eight weeks.

A large healthcare insurance provider has reduced customer churn by identifying customers who may be unhappy with their coverage plans and acting before they churn. They've been able to retain customers and increase customer satisfaction. They delivered their first solution in just three weeks with only four engineers.

One of the largest multinational oil and gas companies built a solution to reduce CO2 emissions and the carbon footprint of its client: large industrial and mining complexes. They reduced overall fuel consumption by 7% and fuel pilferage (fuel theft) by 3%. Their first implementation was delivered in less than five weeks.

Looking ahead, we aim to expand our partnerships in the coming months. We will also continue to grow our sales, marketing team, and support teams in the US. **CA**