FEATURE STORE SUMMIT

12-13 OCTOBER | 08:30 AM - 4:00 PM PT

ORGANIZED BY HOPSWORKS

Better Gaming Experiences with Machine Learning and the Hopsworks Feature Store



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Better Gaming
Experiences with
Machine Learning and
the Hopsworks Feature
Store



Wildlife's mission

We are in a journey to create **games** that will **mark a generation**

Our games needs to be engaging, fun, and feel amazing to play with







The road so far













But it's not only about making games

We also need to make them **stand in a sea of countless options**, so they can get noticed and reach the hands of those soon to be amazed by

Since we do not charge for our games, users must find inside the game **content** that is relevant enough to be acquired by them

Thus, attracting and engaging users is essential!





ML also has its role

We need to be really **smart** about making **decisions** (icons, levels, characters, genres, items,...)

Data as a fuel, and we have lots of it!!!

ML models are a natural choice/necessity for those who want to get ahead of the competition





Where it all started

Historically, inside the company, **ML** was independently applied by squads at **specific problems** (revenue prediction, online advertisement, ...)

Data Engineers were the go-to option to support Data Scientists





Specialization was needed

More knowledge about the challenges of scaling ML was needed

That's where ML Engineers (MLEs) entered the stage

MLEs brought software engineering good practices and automation for common tasks (e.g. feature computation, model deployment)





Simplifications are dangerous but

In the company:

Data Scientists focus on modeling and analysis

MLEs focus on scalability and efficiency





There is always room for improvement

Knowledge was not easily spread across squads

Some problems were being repeatedly solved by different teams





On centralizing and scaling ML

Then, it was the time to tackle **ML** as a more **systematic effort**

We wanted some people **fully dedicated** to advance **MLOps** adoption in the company as a whole, not so limited to any particular use case





Context matters

At the company-level, Engineering is focusing in **Governance** and **Developer Experience (DX)** and **Data Scientists** are also **developers**!

Best practices and **standards** can be spread (and sometimes even enforced) through **technology**. So, building internal products becomes a thing!





The ML Apps team is assembled

We gathered **people** with **different backgrounds** (data engineering, sre, machine learning) that have being worked on different ML-related initiatives inside the company

Together, we started to **develop** the **tools** we wanted to have from the start that embody our beliefs about good **MLOps**





One platform to rule them all









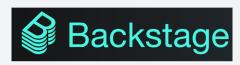














Feature Store at the heart of MLOps

Data is everywhere

Both Batch and Streaming have their role to play

Training-serving skew can be tackled in a systematic way





Hopsworks FS for us

















Why Hopsworks?

Nice integration with our ecosystem

Great performance for online serving

Cost-effectiveness

Solution's **maturity** level and **support**





The challenges ahead

How to **optimize** resource usage?

How to get to the next level of **CI/CD** coverage?

How to scale model performance monitoring?

And many more!!



Of course, we are hiring!



Thank you!

Do you have any questions?

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