FEATURE STORE SUMMIT

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ORGANIZED BY HOPSWORKS

Better Gaming Experiences with Machine Learning and the Hopsworks Feature Store

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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

From left to right (from top to bottom): Tennis Clash, Sniper 3d, Bike Race, Zooba, Suspects

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!

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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

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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**

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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)

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Simplifications are dangerous but

In the company:

Data Scientists focus on **modeling** and **analysis**

MLEs focus on **scalability** and **efficiency**

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There is always room for improvement

Knowledge was not easily **spread** across squads

Some problems were being **repeatedly solved** by different teams

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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

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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!

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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**

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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

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Hopsworks FS for us

Why Hopsworks?

Nice **integration** with our **ecosystem**

Great **performance** for online serving

Cost-effectiveness

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

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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!

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Thank you!

Do you have any questions?

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