

**Ludovik Coba, Machine Learning Scientist, Expedia Group, UK**

**Title:** Challenges and Considerations for Productionizing Recommender Systems

**Abstract:** Recommender systems have become an integral part of modern online platforms and applications, leveraging machine learning techniques to assist users in finding relevant items or content based on their preferences, past behaviors, or similarities to other users. With the vast number of available options, these systems play a crucial role in enhancing user experience, increasing engagement, and facilitating decision-making.

Recommender systems can be found across a wide range of online platforms and applications, including e-commerce websites, streaming services, social media platforms, news portals, and more. Their primary goal is to help users navigate through an overwhelming sea of choices and discover new products, movies, music, articles, and other items of interest.

However, successfully deploying recommender systems in a production environment is not without its challenges. Organizations face various hurdles that need to be overcome to deliver effective and scalable recommendations to users. Some of these challenges include harmonizing multiple data sources, scalability, evaluation, feedback loop, ethical considerations, maintenance, and adaptability. To successfully deploy recommender systems in a production environment, organizations must carefully consider these challenges and address them through appropriate strategies and solutions. This presentation will delve into each of these challenges in detail, providing insights and best practices for overcoming them and delivering robust and effective recommender systems that enhance user experiences and drive user engagement.

**Bio:** Ludovik Coba holds a PhD in Computer Science from the Free University of Bozen-Bolzano. He is currently a Machine Learning Scientist at Expedia Group working on innovating recommender systems for the travel industry. He publishes his research in venues like RecSys or IUI and journals like IT and Tourism, IEEE Computational Intelligence Magazine. He also served on the organizing committee of conferences like RecSys and UMAP and as a PC for IAAA and TheWebConf.