## **Max Mergenthaler**

Nixtla

## A Very Brief History of 5,000 Years of Forecasting: From Nilometers to Pretrained Foundation Models

In this presentation, we offer a perspective on the past, present, and future of the principles and practices underlying forecasting. We begin by tracing a conceptual line from early forecasting practices—such as the Nilometer in Egpyt and oracular traditions in ancient china and greece—to contemporary developments, including foundation models and other neural forecasting architectures. We frame these historical and modern approaches as part of a continuous trajectory in the systematic pursuit of predictive insight.

We then examine the current landscape of time series research and its applications. We pay particular attention to the structural commonalities and divergences between recent advancements in forecasting and those in adjacent fields such as reinforcement learning, natural language processing, and computer vision. We conclude with a forward-looking and deliberately subjective assessment of potential future directions for time series research and its applications.