PRESS RELEASE

Media Contact

Vitor Santos | Silicon Studio | yd-ai@siliconstudio.co.jp |+81 (0)3 5488 7070

Head of YOKOZUNA data, invited speaker at the Mobile World Congress Shanghai 2018

The manager of Silicon Studio's machine learning engine will deliver a talk at the largest mobile event in Asia

Tokyo, Japan (April 6th, 2018) – Dr. África Periáñez, Chief Data Scientist of the middleware and game development company Silicon Studio and manager of YOKOZUNA data—a state-of-the-art machine learning engine that predicts individual player behavior—will participate as an invited speaker at the Mobile World Congress Shanghai 2018, to be held from June 27 to 29 in Shanghai, China.

The Mobile World Congress Shanghai is among the most consolidated mobile-related events in Asia. It combines exhibitions and conferences, in which some of the industry's most influential executives will share their visions of the mobile sector and provide essential insights on current and future trends. The 2018 edition is expected to attract more than 60,000 attendees and 600 participating companies.

Dr. Periáñez will be one of the main speakers of the *Think AI summit* (to take place on Friday, June 29), which will examine the role of artificial intelligence (AI) in a number of industries at the forefront of the AI revolution and host discussions about how to integrate AI into society. The organizers have handpicked a small sample of companies and programs working at the true edge of AI to inspire, educate and challenge attendants, one of them being YOKOZUNA data.

YOKOZUNA data is an award-winning machine learning engine that predicts individual player behavior and is pushing the limits of game development. It includes a recommendation system and a player forecast platform that make use of sophisticated AI techniques to predict churn and perform advanced game analysis. YOKOZUNA data allows developers to know which players will leave the game, when they will do it, and which preventive actions (such as personalized promotions and events) would be most effective in retaining them. YOKOZUNA data can also be used to foresee the impact of marketing and in-game events and supports games of all sizes by employing the newest big data and cloud computing technology. After demonstrating its effectiveness and accuracy in video games (for instance, by winning both tracks of the Game Data Mining competition hosted at the CIG 2017 conference), YOKOZUNA data is now entering the healthcare sector, with the aim of contributing to the development of preventive medical care.

In her talk, titled "Mobile Games and Big Data: A Primer" (abstract below), Dr. Periáñez will share her experience on cutting-edge learning models. After summarizing the state of the art of game data science, she will introduce some of the machine learning methods behind the success of YOKOZUNA data, highlighting the appealing features that make them useful in real business settings.

Abstract of the talk by Dr. África Periáñez

Mobile Games and Big Data: A Primer

Always-online mobile games are rapidly transforming the video-game industry. Nowadays, developers are able to collect a huge amount of data in real time while interacting with their players. This has brought about new business models (in-app purchases, free-to-play) and created a fantastic opportunity for trying to increase player engagement and maximize monetization through big data analytics. In order to do so, it is essential to develop suitable machine learning methods to model and predict player behavior, so as to optimize in-game events accordingly. Further, to be useful in an operational business environment, these techniques should scale to large datasets, easily adapt to different kinds of games and players (namely, to different data distributions) and allow intuitive visualization of the results.

In this talk, after summarizing the state of the art of Game Data Science, I will discuss such techniques. I will focus on cutting-edge deep learning methods that help to predict individual-player actions in mobile games, e.g. the time up to the next in-app purchase, type of item that will be selected, and churn, which is decisive to increase player retention and raise revenues.
The proposed methods do not need prior manipulation of the data, can deal efficiently with the temporal nature of the player-prediction problem, and are robust and flexible enough to make predictions in a realistic business setting.

Outline of the Mobile World Congress Shanghai 2018

Dates: June 27 to 29, 2018
Venue: Shanghai New International Expo Centre (SNIEC)
                     2345 Longyang Road, Pudong New District, Shanghai, China
Official site: https://www.mwcshanghai.com/

About África Periañez

Dr. África Periáñez is the Chief Data Scientist at Silicon Studio and also the manager of Yokozuna Data (yokozunadata.com). She has 12+ years of experience. África holds a PhD in Mathematics from the University of Reading (UK), a Master of Advanced Studies in String Theory Physics carried out at CERN and an MSc in Theoretical Physics from the Autonomous University of Madrid.

She has worked as a research scientist in renowned institutions such as CERN (under a Marie Curie Individual Fellowship), RIKEN in Japan (working with the world's fourth-fastest K-computer), DWD in Germany (German Weather Service, working in Satellite Data Assimilation) or the University of Reading in the UK. She is the coauthor of more than 15 peer-reviewed articles and has been a speaker in more than 20 international conferences and many regular seminars. She also has significant industry experience at SPSS Inc., IBM and now Silicon Studio. Her main research interests include ensemble-based methods, deep learning applied to time-series forecast and Bayesian approaches to predict player reactions. Additionally, she explores the modeling of social virality in games through advanced epidemiological methods.

About YOKOZUNA data

YOKOZUNA data is a state-of-the-art machine-learning engine to predict individual player behavior. It consists of a recommendation system and a player prediction platform that utilize next generation artificial intelligence algorithms to move game development into the future. Recently, it has also entered the healthcare sector, with the aim of contributing to the development of preventive medical care. http://yokozunadata.com/

About Silicon Studio

Silicon Studio is a Japan-based game engine and middleware company providing quality rendering, optical effects, and post-effect solutions for game development. Silicon Studio also develops and publishes games across mobile, PC and console platforms, and develops games for third parties. https://www.siliconstudio.co.jp/

* YOKOZUNA data is a trademark of Silicon Studio Corporation.

* All other names and trademarks mentioned are the registered trademarks and property of the respective companies.