



UNIVERSITÀ  
DEGLI STUDI  
DI BRESCIA

Course Seminars/Webinars Cycle with External Experts/Testimonials

***Course: Data analysis and Big Data***

BSc in Economics and Digital Firm

Department of Economics and Management

University of Brescia, Brescia, Italy

Academic Year 2022-23

**Title: Big data and bigger data**

**Speaker:** Marcus Lundberg, UPPMAX, Uppsala University, Uppsala, Sweden

**Modality:** Webinar

**Date:** November 25, 2022 (3.30pm - 4.30pm)

**Abstract:** UPPMAX is a University computer center with over 20 PB of storage for active research projects in a variety of research fields and users from all over Sweden. The user support team has more than half a century of collective experience helping researchers with the problems they encounter. In this lecture, stories of real problems will be used to motivate a discussion of performance considerations in practice. Technical topics that will be covered include approaches to minimise storage size on disk, common performance bottlenecks and how to identify them, and best practices in performance optimisation. Along the way, students will learn about the high-performance computing landscape in Sweden and data-intensive research projects that the lecturer has encountered. For example, it will be briefly discussed a [project](#) to calculate the kinship distance of all individuals in the Swedish population, and other projects that involved the transmission of many terabytes of data over great distances.

**Speaker's Brief Bio:** With a background in scientific computing, a branch of computer science, Marcus Lundberg is the coordinator of advanced user support at UPPMAX and manager of the Bioinformatics Compute and Storage unit in the Science for Life Laboratory. In these and related roles, he has in the past ten years worked with dozens of research projects in a wide variety of scientific domains, from astronomy to bioinformatics and economics.

**Link to Website:** <https://www.uppmx.uu.se/>

**Google Meet link:** [meet.google.com/gms-zujm-gxz](https://meet.google.com/gms-zujm-gxz)