Speaker: Bernardo Gonçalves, PhD Candidate at LNCC

Title: \$\Upsilon\$-DB: Managing Scientific Hypotheses as Uncertain and Probabilistic Data

Abstract: In view of the paradigm shift that makes science ever more data-driven, we consider deterministic scientific hypotheses as uncertain data. In this talk we present the vision of \$\Upsilon\$-DB. It comprises a probabilistic database (p-DB) design methodology for the systematic construction and management of U-relational hypothesis DBs, viz., \$\Upsilon\$-DBs. From a software point of view, \$\Upsilon\$-DB is a probabilistic data system designed for scientists and engineers to manage and evaluate (rate/rank) data-intensive scientific hypotheses. We illustrate the potential of \$\Upsilon\$-DB as a tool for deep predictive analytics.