ISEL
ADEETC
Área Departamental de Engenharia Electrónica e Telecomunicações e de Computadores

Resumo da Proposta de Ideia Para Dissertação de Natureza Científica ou Trabalho de Projecto

Código: MEIC-03
Designação: Profiling KPIs in highly scalable networks

Orientador(es): José Simão, Nuno Datia
Contacto do orientador: jsimão@cc.isel.ipl.pt, datia@isel.pt
Local de contacto: CC, salas 20 e 19

(preenchimento opcional) *remover o **X** que não interessa* (Mestrado(s) onde é oferecida)

Dissertação	X	Trabalho de Projecto	X		MEIC	X	MEET	X	MERCM	X

Resumo: In this thesis / internship, the student is expected to study, develop and implement a state-of-the-art model to build a profile for a network metric / indicator. The model must take into account functional requirements (data aggregation, seasonality, reporting ability, REST interface for remote access) and physical requirements (storage and computing needs).
The final component developed must be deployable in a container-enabled cloud environment and be elastic – its processing capacity must increase or decrease according to the number of resources / containers assigned to it, and must be able to scale up or down dynamically.
At the end of the thesis / internship the performance and scalability of the solution must be assessed.

Observações & Requisitos: This work will be carried in colaboration with NOKIA. The student is expected to read and understand academic papers and practitioner books in the area of statistic calculation. Therefore, excellent quantitative and analytical skills are mandatory to successfully complete the thesis / internship. The student is expected to implement the solution in a cloud environment, using Kubernetes orchestration, Docker containers and preferably Java as programing language exposing an REST interface for access the service. The student is expected to interact with a team of developers. Thus, strong interpersonal skills are required. Working ability in English is also strongly recommended.

Classificação ACM:
Information systems → Data analytics
Networks → Network performance analysis
Computer systems organization → Reliability

Rua Conselheiro Emídio Navarro 1
1959-007 Lisboa- Portugal
Tel: (+351) 218 317 000
Fax: (+351) 218 317 162
Web: www.isel.pt