



WORKSHOP MODCS 2017.1

Proposal

Optimization Models for Offloading Decisions on Mobile Cloud Infrastructure Planning

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UNIVERSIDADE
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70 ANOS
TEMPOS TRANSVERSOS



Motivation

How MCC works?

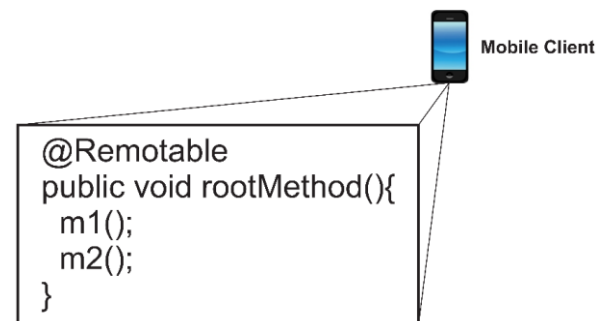
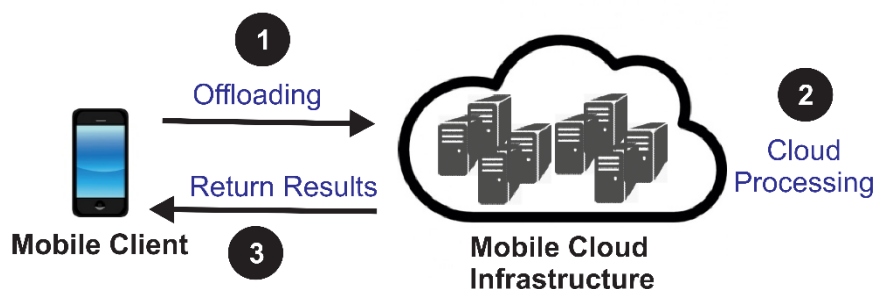


Table 2: Scenarios to Methods Calls Executions

Scenario	<i>m1()</i>	<i>m2()</i>	<i>m3()</i>
#1	cloud	cloud	cloud
#2	cloud	cloud	device
#3	cloud	device	cloud
#4	cloud	device	device
#5	device	cloud	cloud
#6	device	cloud	device
#7	device	device	cloud
#8	device	device	device





Motivation

Planning Mobile Cloud Infrastructures Focusing on Partial Method-Call Offloading

Thiago Pinheiro^a, Francisco Airton Silva^a, Iure Fé^a, Sokol Kosta^{b,c}, Paulo

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#6	device	cloud	device
#7	device	device	cloud
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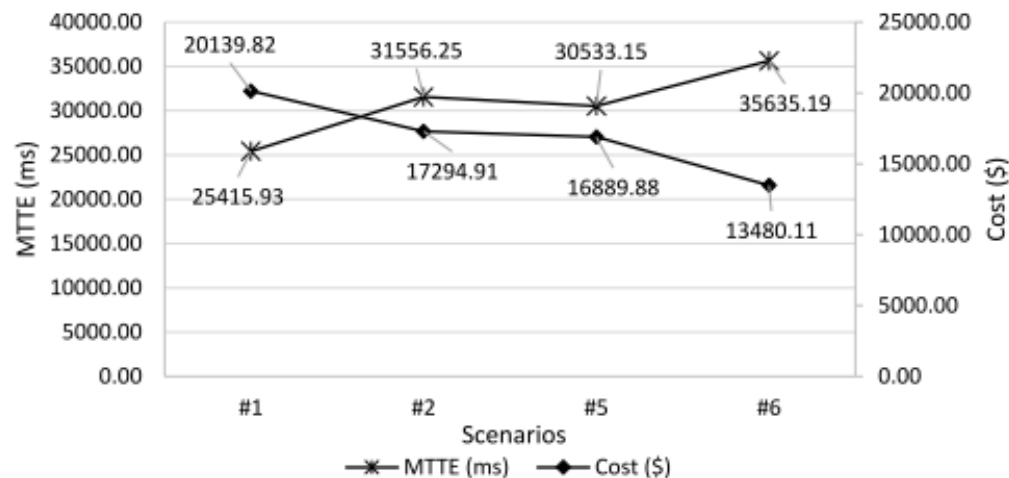
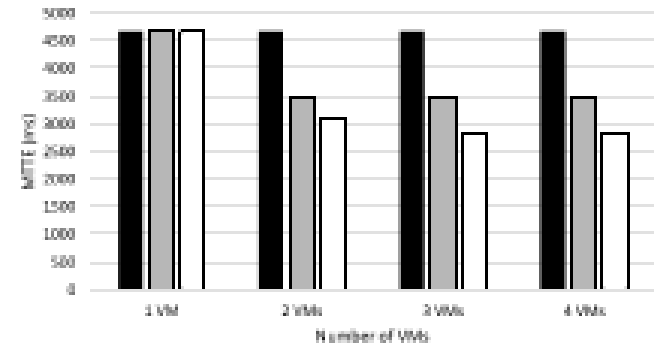


Figure 14: Comparing MTTE and Cost.



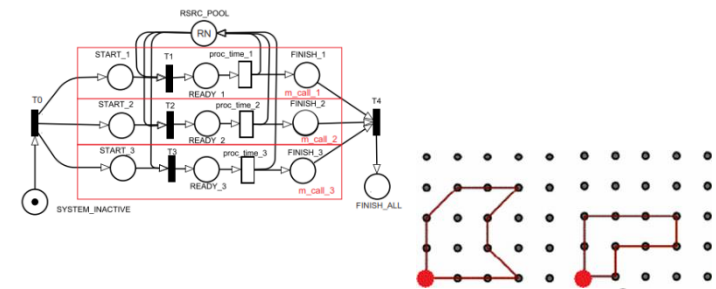
The Problem

How to find the most appropriate offloading strategy to support the mobile cloud infrastructure planning taking into account specific factors?



SLA and Costs

to propose optimization models for offloading decisions to identify optimal configurations based on SLA and offer costs decrease to support mobile cloud infrastructure planning



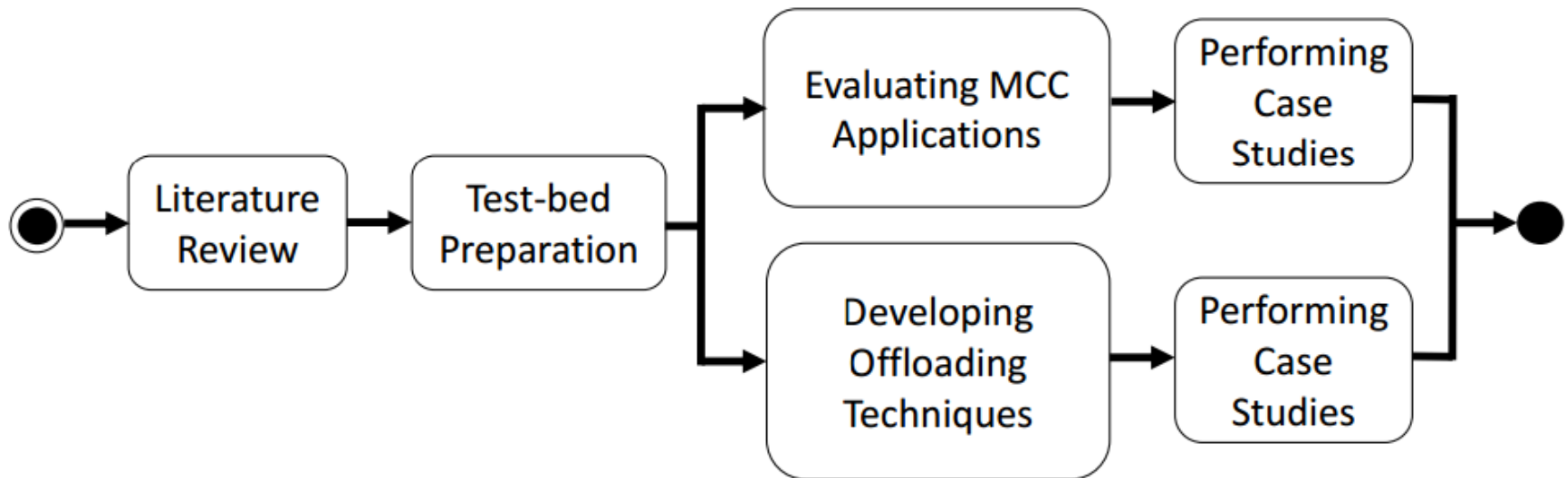


General Objective

The main objective of this research is to conceive and implement **algorithms, models, and methods** applied to **offloading decisions on mobile cloud infrastructure planning** to support performance improvement, extending mobile device autonomy, minimizing costs and making the use of available resources more efficient.



Research Methodology





Thank You