



**INSTITUTO POLITÉCNICO DE BEJA**  
**Escola Superior de Tecnologia e Gestão**  
**Mestrado em Engenharia de Segurança Informática**  
**Direito na Segurança Informática e no Cibercrime**

# **Unveiling Samsung Quantum Galaxy: Securing Smartphones With Quantum and Post-Quantum Cryptography**

Martinho José Novo Caeiro - 23917  
Paulo António Tavares Abade - 23919



Beja, janeiro de 2026

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Orientador: Rui Miguel Silva & Daniel José Da Graça Peceguinha Franco

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# 1 Article Analysis

The analysis of the article will be made through the answers to the questions on the *template* that was provided by the professor.

## 1.1 What is the name of the research?

The name of the research is "Unveiling Samsung Quantum Galaxy: Securing Smartphones With Quantum and Post-Quantum Cryptography".

## 1.2 Where the research was published?

The research was published in the journal "IEEE Access", which is a multidisciplinary, open access journal of the Institute of Electrical and Electronics Engineers (IEEE).

## 1.3 Who is the author?

The name of the author is Omar Alibrahim, a researcher with support from Kuwait Foundation for the Advancement of Sciences (KFAS). The research was published on 2nd of May 2025.



- 1.4 What's the theory of research?
- 1.5 What's the problem being addressed in this study?
- 1.6 What are the objectives addressed?
- 1.7 What are the study's strength points?
- 1.8 What are the study's weaknesses?
- 1.9 Which type of methodology was adopted?
- 1.10 Clearly identify the adopted research design method.
- 1.11 Briefly explain the variable of analysis used on this study.
- 1.12 Clearly identify the criteria/equations that were used to validate results.
- 1.13 Critically analyze the presented results
- 1.14 What are the conclusions presented by the author?
- 1.15 What is the contribution to the existing knowledge?
- 1.16 Can you accept the findings as true? Discuss any failing and shortcomings of the method used to support the findings.
- 1.17 Summarize your conclusion on the analyzing the benchmark.
- 1.18 What is the main gap that you have identified on this study, and that you are willing to address on your research?
- 1.19 Which part of the benchmark will you use in your study, in order to compare your results with their outcomes?
- 1.20 Conclude by summarizing the Research Problem + Research Gap+ Purpose of the study (MAXIMUM 40 WORDS)