

## PREFACE

First, the author would like to express the gratitude to the Almighty God for all His abundant grace and gifts so that the author can complete the thesis entitled “Advanced Genomic Profiling and Classification of Breast Cancer Types: Leveraging Machine Learning Techniques for Precision Diagnostics” well and on time. This thesis is compiled as one of the requirements to obtain a bachelor’s degree and complete studies in the Telecommunication Engineering Bachelor’s Degree program at Telkom University, Bandung.

The selection of this topic is motivated by the need for a faster and more accurate way to detect breast cancer. The previous method of detection is rather lengthy overall and may induce anxiety and panic in patients. This website is expected to classify breast cancer types effectively, quicken initial results, and assist medical personnel in clinical decision-making using machine learning-based technology in a broader commercial environment. This reduces the diagnosis time and gives patients reassurance and certainty sooner.

This thesis has limitations, and the author’s knowledge in this field is still developing. Therefore, the author expects constructive input and suggestions to improve this work. Finally, the author would like to express deepest gratitude to all parties who have supported during the preparation of this thesis and apologize for any errors or shortcomings. The author hopes this research will be helpful for readers, academics, and practitioners in machine learning, and social media analysis.

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Author 1



Aurellia Rasya  
Gunawan

1101213214

Author 2



Ghina Mufidah

11001213452

Author 3



Shania Wardani

1101213427

Author 4



Tia Hasna Humayra

1101213479