

**UNDERGRADUATE THESIS**

***REDUCING HALLUCINATIONS IN DOMAIN-SPECIFIC QA  
THROUGH A HYBRID ARCHITECTURE OF FINE-TUNED  
ENCODER-ONLY AND DECODER-ONLY  
LARGE LANGUAGE MODELS***



**IZZELDIN RAYYAN BASTIAN  
21/477936/PA/20718**

**COMPUTER SCIENCE STUDY PROGRAM  
DEPARTMENT OF COMPUTER SCIENCE AND ELECTRONICS  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS GADJAH MADA  
YOGYAKARTA**

**2026**

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Submitted to fulfill one of the requirements to obtain the degree of  
Bachelor of Computer Science



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SKRIPSI (RISET AKADEMIK)

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Telah dipersiapkan dan disusun oleh

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Telah dipertahankan di depan Tim Penguji  
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Pembimbing

Mengetahui,  
a.n. Dekan FMIPA UGM  
Wakil Dekan Bidang Keuangan, Aset,  
dan Sumber Daya Manusia



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