

**A DESIGN OF UNKNOWN INPUT OBSERVER FOR ROBUST  
OPEN CIRCUIT VOLTAGE ESTIMATION AGAINST  
UNCERTAINTY CAUSED BY UNDESIRED HYSTERESIS ON  
THEVENIN BATTERY MODEL**

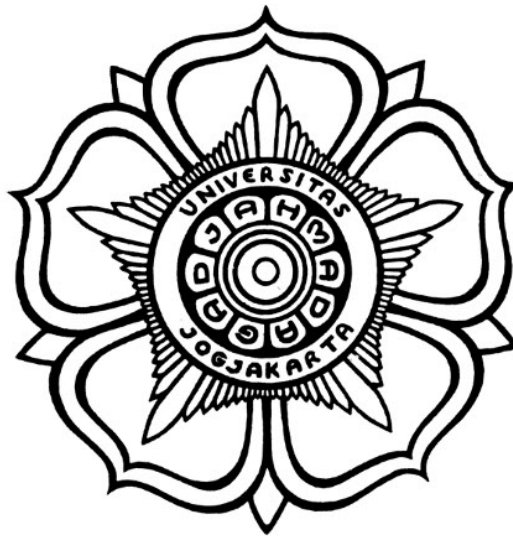
**Thesis**

submitted in partial fulfillment of the requirements  
for the degree of master

Electrical Engineering Graduate Program

Signal and Electronic Systems

Department of Electrical Engineering and Information Technology



proposed by

**Bobby Rian Dewangga**  
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To

**GRADUATE PROGRAM  
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