A COMPREHENSIVE STUDY OF OSTROWSKI METHOD AND MODIFIED OSTROWSKI METHOD FOR SOLVING NONLINEAR EQUATION

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Thesis Submitted in Fulfillment of the Requirement for

Bachelor of Science (Hons.)

Mathematical Modelling and Analytics

College of Computing, Informatics and Mathematics

ABSTRACT

The Ostrowski method, as compared to the other method, has an additional parameter for solving large systems of nonlinear equations. This research uses the Modified Ostrowski method using α_i to improve convergence speed and computational efficiency. Considering there have been several improvements to Ostrowski, the Modified Ostrowski is presented for comparison with the classic Ostrowski. The comparison is based on the number of iterations and CPU time under the same tolerance factor. The best method can be identified by its low iteration number and quick CPU time.

ACKNOWLEDGE

Alhamdulillah. Most importantly, I'd like to appreciate and thank Allah for providing me the strength and His favor. After nearly a year, I accomplished this research project. Without his blessing. I couldn't have gotten this far.

Aside from that, I'd want to express my gratitude to my supervisor, Madam Ruhana Binti Jaafar, because my study would not be complete without her guidance. She supported me despite the fact that I had an issue early on in this project. She consistently encourages and advises me to get a positive end for this assignment.

On the other hand, I'd want to offer my heartfelt gratitude to the other lecturers. First and foremost, I am grateful to Dr. Syazwani Binti Mohd Zokri for her assistance with the proposal project and for introducing me to the features of the EndNote software for Microsoft Word. Next, I'd like to express acknowledgment and make an offer to Dr. Atikah Binti Salahudin, the Coordinator of the Final Year Project, for assistance in completing this project.

Finally, I'd want to appreciate my parents for always being supportive. Their affection constantly motivates and strengthens me to complete my research project. Then, I wanted to thank my classmates for sharing some expertise they received from their supervisors and assisting me with anything about this project.

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