

UNCERTAINTY ANALYSIS OF ARTIFICIAL NEURAL NETWORK (ANN)
APPROXIMATED FUNCTION FOR EXPERIMENTAL DATA USING
SEQUENTIAL PERTUBATION METHOD

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SUPERVISOR'S DECLARATION

I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the degree of Bachelor of Mechanical Engineering.

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I hereby declare that the work in this project is my own except for quotations and summaries which have been duly acknowledged. The project has not been accepted for any degree and is not concurrently submitted for award of other degree.

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LIST OF SYMBOLS

| | |
|-----------|--------------------|
| % | Percent |
| \dot{m} | Mass flow rate |
| T_1 | Inlet temperature |
| T_2 | Outlet temperature |
| A_m | Mean area |
| K | Kelvin |
| K_g | Kilogram |
| s | second |
| mm | millimetre |

LIST OF ABBREVIATIONS

| | |
|---------|-------------------------------------|
| SP | Sequential Perturbation |
| ANN | Artificial Neural Network |
| J | Joule |
| U% | Uncertainty percent |
| FYP | Final Year Project |
| NN | Neural Network |
| CNS | Centre Nervous system |
| RBF | Radial Basic Function |
| MATLAB® | The Language of Technical Computing |