

MASTER OF SCIENCE THESIS

Hybrid Vortex Method for 2D Vertical-Axis Wind Turbine

A fast and accurate Eulerian-Lagrangian numerical method in
python

L. Manickathan B.Sc.

01.12.2013

Faculty of Aerospace Engineering · Delft University of Technology

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For obtaining the degree of Master of Science in Aerospace
Engineering at Delft University of Technology

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DELFT UNIVERSITY OF TECHNOLOGY
DEPARTMENT OF
AERODYNAMICS AND WIND ENERGY

The undersigned hereby certify that they have read and recommend to the Faculty of Aerospace Engineering for acceptance a thesis entitled **“Hybrid Vortex Method for 2D Vertical-Axis Wind Turbine”** by **L. Manickathan B.Sc.** in partial fulfillment of the requirements for the degree of **Master of Science**.

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Summary

This is the summary of the thesis.

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Appendix A

Mathematical Model

A.1 Introduction

This appendix contains the math model of the thesis. It looks as follows:

$$c = \sqrt{a^2 + b^2} \tag{A.1}$$

