

MIE 673 - Homework 1

Jamie Lyman

February 10, 2026

Abstract

Your abstract.

1 Hacking Skills

(a) From the command, we learned the following about it's compilation:

- Precision: single
- Date: Jan 28 2026
- Time: 21:04:40

(b) The *describe* command gives us a readable based on the git reference for the current commit which is *v4.2.0-1-ge31979f*. /

(c)

(d) The variable BldNodes is different between 5 MW and 10 MW wind turbine models, 17 versus 50 nodes. This makes sense as to understand the structural dynamics of the wind turbine blades, forces and displacements are calculated for a set of discrete nodes along each blade. With longer blades, to achieve similar structural and aerodynamic modeling accuracy, more blade nodes are used.

(e) Plotting worked, I can see chord length as a function of span!

2 Scaling and Power

INCOMPLETE, due to poor time management this section will be completed after the deadline.