
bemused Documentation

Rick Lupton

May 20, 2019

Contents

1	Contents	3
1.1	License	3
1.2	Contributors	3
1.3	Changelog	3
1.4	bemused package	4
2	Indices and tables	5

This is the documentation of **BEMused**, a Python implementation of the [Blade Element Momentum \(BEM\)](#) method of modelling the flow around and loads on a wind turbine rotor (or other kind of rotor).

This code was originally written for [Rick Lupton's PhD thesis](#) and used in [a related paper](#).

To use it you need to create a `bemused.Blade` object defining your blade parameters (chord, twist and thickness) and an `bemused.AerofoilDatabase` containing lift and drag coefficients. You can then use `bemused.BEMModel` to do the calculations.

1.1 License

The MIT License (MIT)

Copyright (c) 2019 Rick Lupton

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.2 Contributors

- Rick Lupton <mail@ricklupton.name>

1.3 Changelog

1.3.1 Version 0.2

First release as *bemused*. This code was previously on Github under the name “*py-bem*”.

1.4 bemused package

CHAPTER 2

Indices and tables

- `genindex`
- `modindex`
- `search`