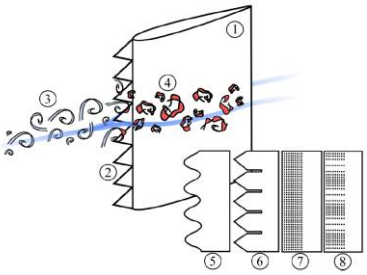
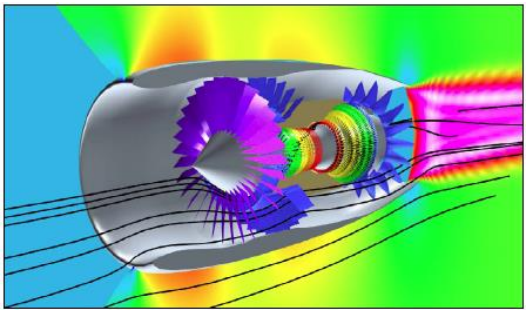
Quiet Owl-Inspired Wings for Wind Turbines and Aero-engines

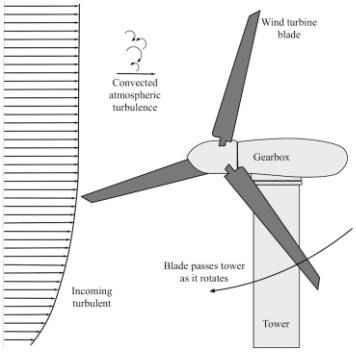
Quiet Owl



Serrated and Porous Wings



Aeroengine Flow



Wind Turbine Flow

An exciting opportunity is available to develop innovative airfoil and blade designs that are simultaneously quiet and have excellent aerodynamic performance. These designs leverage the serrated and porous nature of owl wings which are well-known to be extremely quiet during flight. PhD students are needed to develop new poro-serrated airfoil leading edges and study their combined aerodynamic and aeroacoustic properties using advanced experimental and numerical means. These designs are of great interest to the aerospace, renewable energy and defence sectors, who will be able to utilise them in aircraft engines, wind turbines and naval vessels. The skills you will develop in the PhD program will not only include critical thinking, project management and independence, but you will be an expert in highly sought-after skills such as wind tunnel testing, acoustics, signal processing and CFD.

For more information, please contact Professor Con Doolan c.doolan@unsw.edu.au , Dr Danielle Moreau d.moreau@unsw.edu.au or Dr Charitha de Silva c.desilva@unsw.edu.au

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