https://github.com/zandalman/YUAA ornithopter

Ornithopter github

http://www.ornithopter.org/

- Comprehensive ornithopter resource
- How do ornithopters fly? (http://www.ornithopter.org/how.fly.shtml)
- How-to section (http://www.ornithopter.org/how.1.shtml)
 - Power systems (http://www.ornithopter.org/how.motor.shtml)
 - Gear design (http://www.ornithopter.org/how.gear.shtml)
 - Flapping mechanism (http://www.ornithopter.org/how.flap.shtml)
 - Wings (http://www.ornithopter.org/how.wing.shtml)
 - Stability and control (http://www.ornithopter.org/how.stab.shtml)
- Ornithopter parts seller (http://www.birdkit.com/)
 - Example of Servo-type ornithopter (http://www.birdkit.com/robotics.s1.html)
 - Example of a gearbox for a gearbox-type ornithopter (http://www.birdkit.com/models.gbx.html)
- Flapping Mechanism Design Tool (http://www.ornithopter.org/software.shtml)
 - Software tool for designing ornithopter flapping mechanisms
 - How to use (http://www.ornithopter.org/flapdesign.info.shtml)
 - Useful for spotting asymmetric flapping or a locking of the mechanism

http://www.ornithopter.de/english/principle.htm

• The physics behind ornithopter flight

https://www.mdpi.com/2226-4310/2/2/235/htm

- Scientifically-driven ornithopter design
- Possible test rig setup

https://www.instructables.com/id/Opensource-Ornithopter-Prototype-Arduino-Powered-a/

- Complete how-to on ornithopter design
- Watch the videos!
 - o Part I: https://youtu.be/ruWvzF1fGHw
 - Part II: https://youtu.be/ufivmdAXyZs
 - Part III: https://youtu.be/pB9SABFNbsA

https://youtu.be/0E77j1imdhQ

Human-powered ornithopter

http://www.ornithopter.org/archive/freebird.pdf

- Simple rubber-band ornithopter
- Video instructions: https://youtu.be/AF4SqJF6PdA

https://www.the-nref.org/content/building-robotic-bird

- Servo method ornithopter
- Detailed instructions on how to implement flapping with Servos
- How to steer an ornithopter without a rudder by adjusting wings independently

http://www.brendanbody.co.uk/flight_tutorial/index.html

Useful observations about the flight of birds

https://pages.mtu.edu/~suits/misc/tapsizes.html

Hole sizes for standard screws

Parts

- Servo
 - https://www.servocity.com/hsb-9370th-servo/
- RC controller
 - https://www.racedayquads.com/products/flysky-fs-i6-6ch-2-4ghz-rc-transmitter-w-ia6-rx?variant=31607739383921&gclid=Cj0KCQjw2or8BRCNARIsAC_ppyZIZvyVjFQtWn2D6Cq5RWLeTxrtjhKH7ACsuyGcYTnIrtvQOSKdmMEaAvhNEALw_wcB
 - o https://imgaz.staticbg.com/images/upload/2014/04/FS-i6%20Maniac.PDF
- Accelerometer/Gyroscope
 - https://learn.adafruit.com/adafruit-bno055-absolute-orientation-sensor/arduino-co
 https://dearn.adafruit.com/adafruit-bno055-absolute-orientation-sensor/arduino-co
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