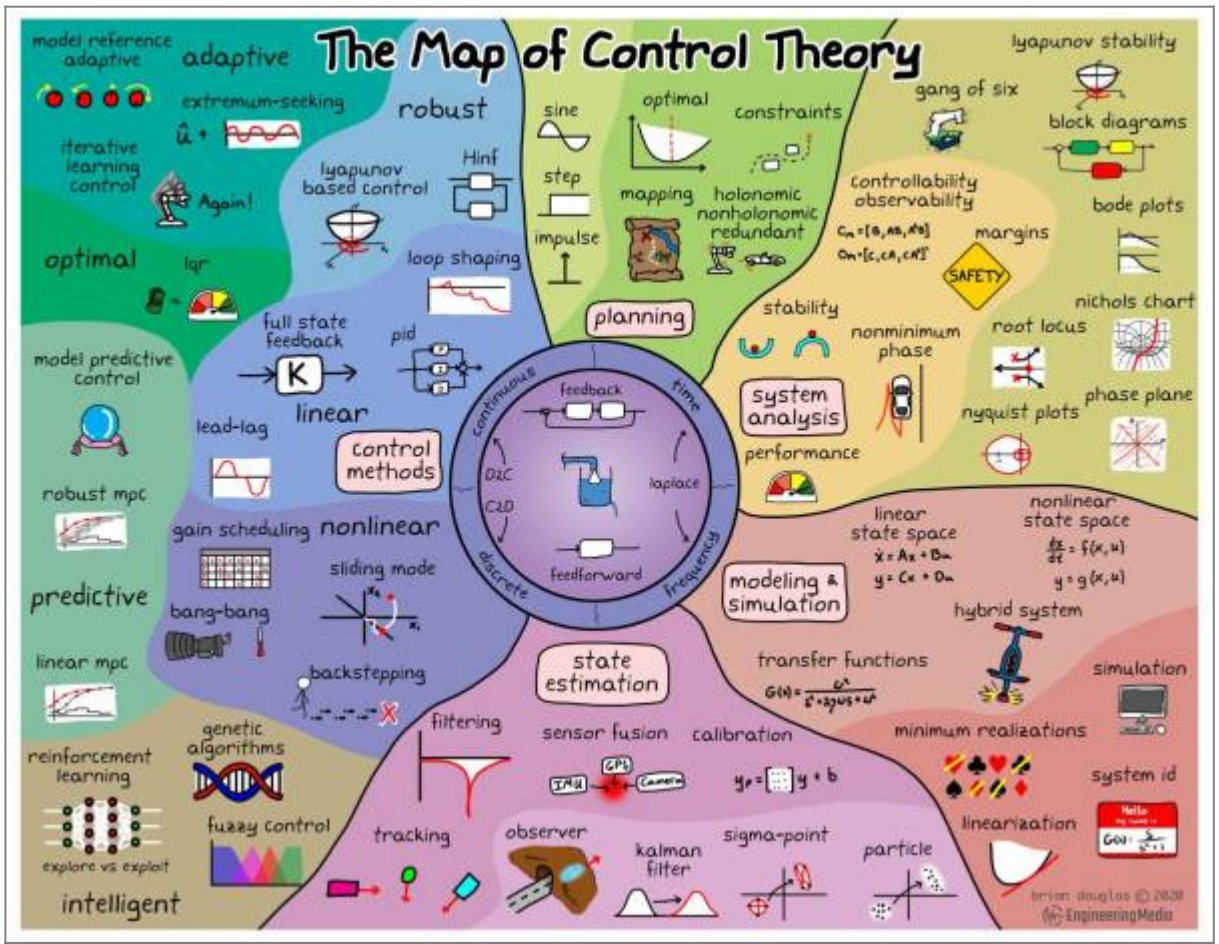
EMRP2022

Topics: Wireless sensor networks to collect environmental data, Interactive web dashboards and databases to display data, Drone technology, sensor integration, and image analysis

Closed loop control

PID Control Theory

https://www.youtube.com/watch?v=wkfEZmsQqiA&list=PLn8PRpmsu08pQBgjxYFXSsODEF3Jqmm-y&ab_channel=MATLAB



https://engineeringmedia.com/map-of-controlFig. 1

Inverted Pendulum with PID

Optimal control of inverted pendulum system using PID controller, LQR and MPC

https://iopscience.iop.org/article/10.1088/1757-899X/263/5/052007/pdf

Stabilising an Inverted Pendulum Controller with PID controller

https://www.matec-conferences.org/articles/matecconf/pdf/2018/11/matecconf_eureca2018_02009.pdf

Control the Ryze Tello Drone from Python

- **tello-pathon** code by Harley Lara: https://github.com/harleylara/tello-python
- **RyzeTelloHSRW** code by Ilgar Rasulov (EligoSoftware): https://github.com/eligosoftware/ryzetellohsrw

git

git for dummies (eli5): https://www.youtube.com/watch?v=mJ-qvsxPHpY&ab_channel=NickWhite

git for professionals: https://www.youtube.com/watch?v=Uszj_k0DGsg&ab_channel=freeCodeCamp.org