



# ABER SAILBOT

[abersailbot.co.uk](http://abersailbot.co.uk)

# The Team





# What do we do?



- Build Autonomous Robotic Sailing Boats
- Write code
- Compete



[fb.com/abersailbot](https://fb.com/abersailbot)



[@abersailbot](https://twitter.com/abersailbot)

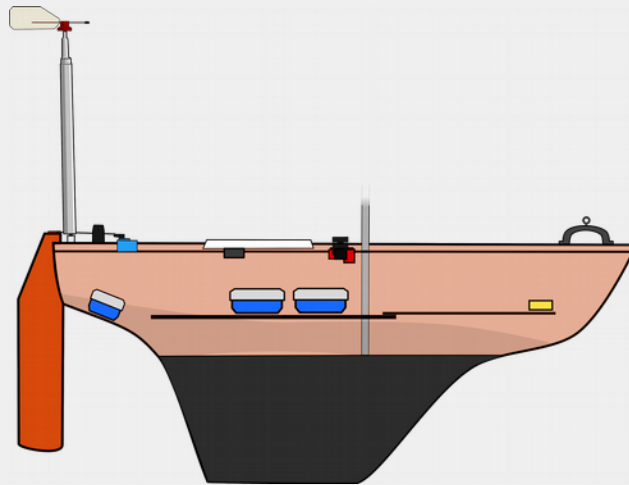


[sailbot@aber.ac.uk](mailto:sailbot@aber.ac.uk)

# The Boats



Dewi'r Ddraig



Kitty



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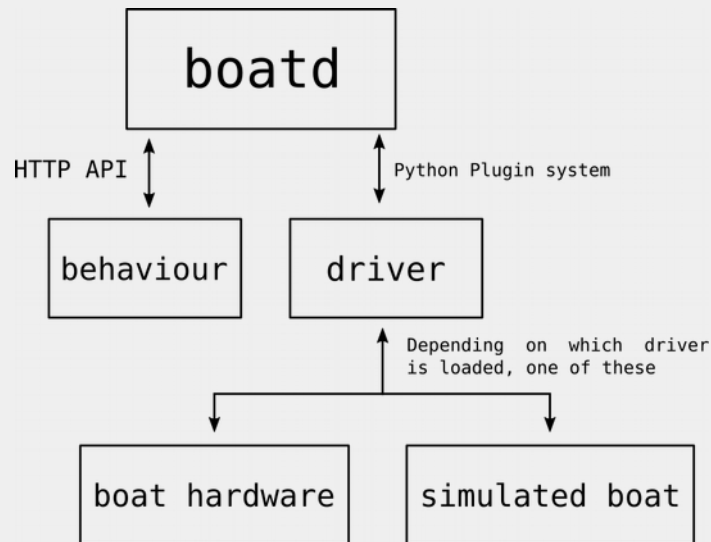
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# Software

- Robotic Sailing Boat Daemon
- Independent behaviours
- Boat specific drivers



<https://github.com/abersailbot>



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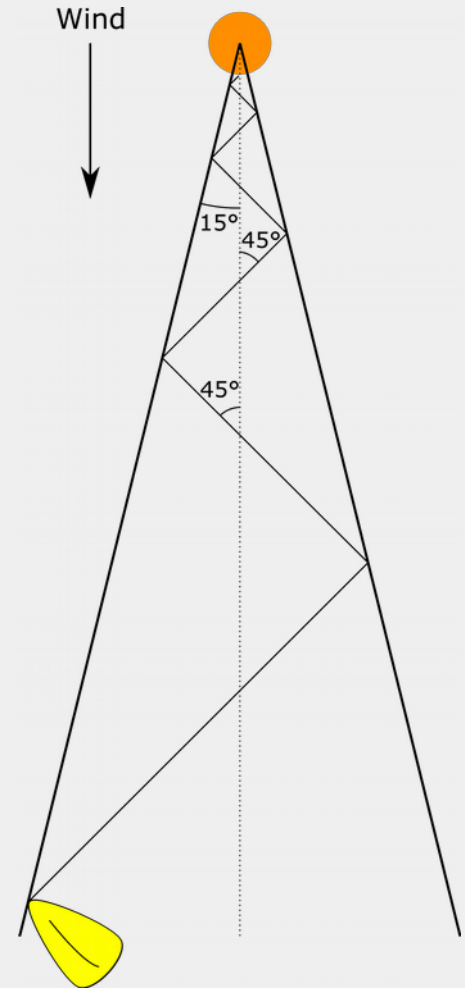
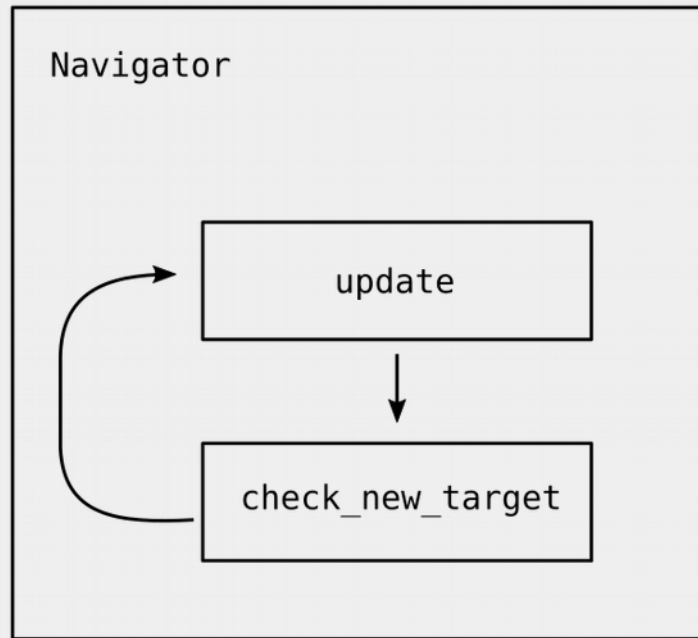


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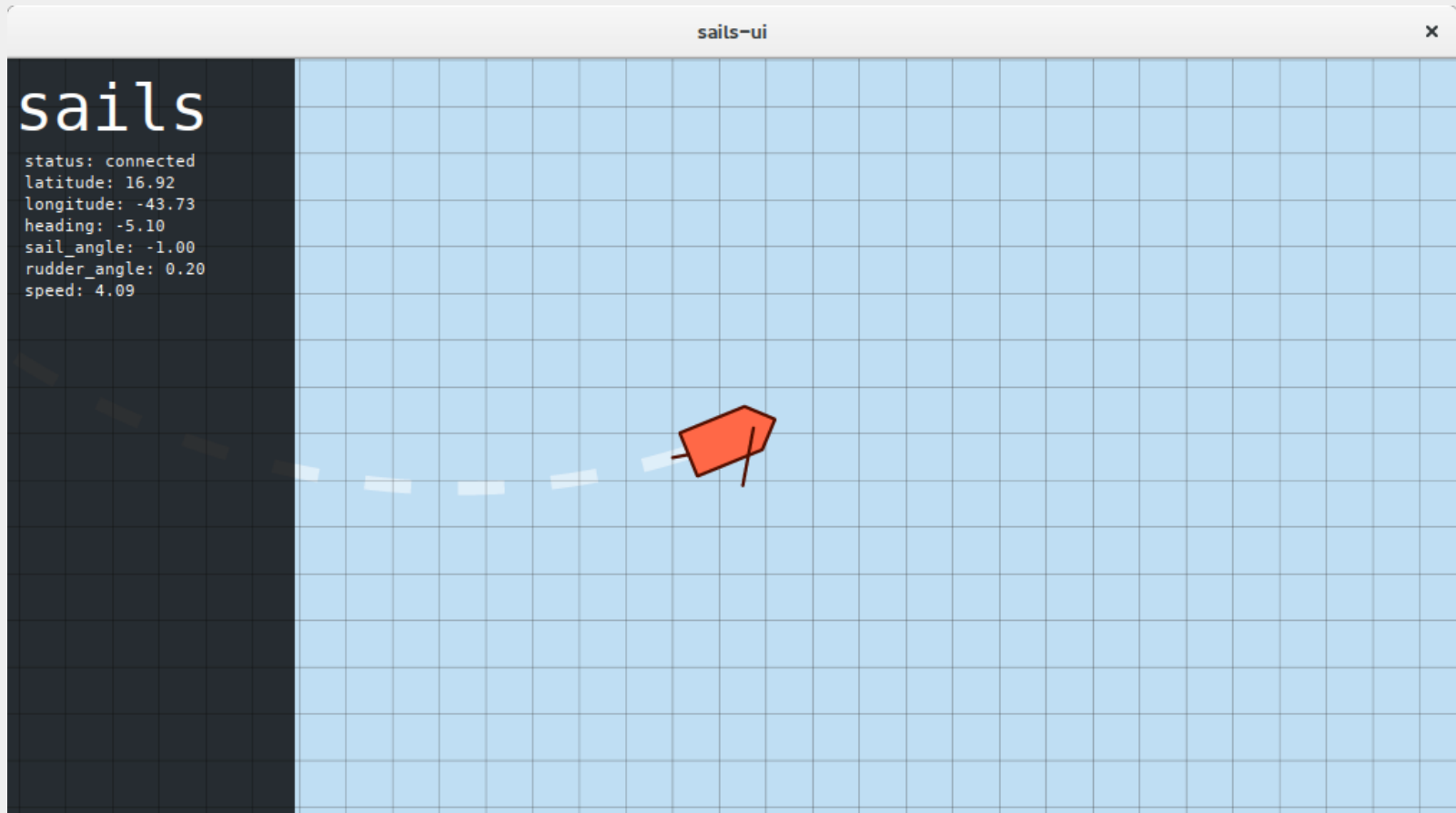


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# Behaviour



# Simulation



<https://github.com/sails-simulator>



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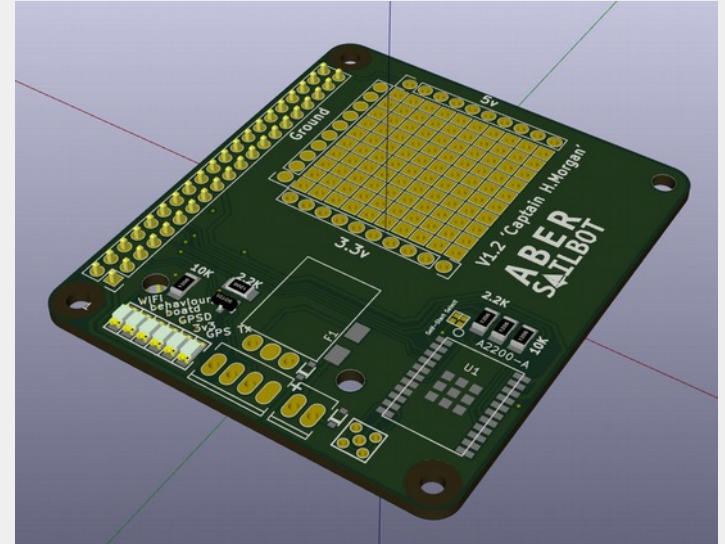
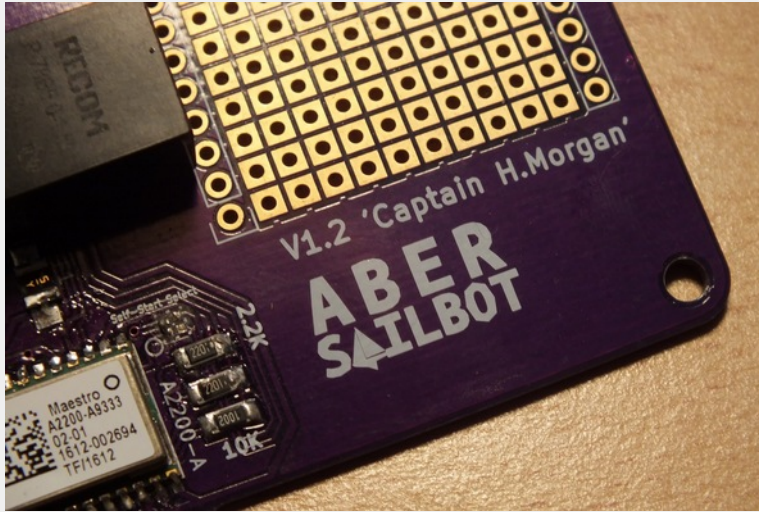
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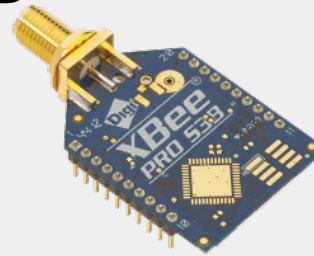
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# Electronics



- RaspberryPi and Arduino
- Captain Morgan PCB
- Wind Sensor
- Compass





# Transport



# Competitions - Sailbot

## SailBot

- Student focused
- Emphasis on boat design
- Usually in USA or Canada
- June 7<sup>th</sup>-12 2020:
  - Amesbury, (near Boston)
  - Massachusetts, USA



# Competitions - WRSC

## World Robotic Sailing Championships

- More research focused
- Emphasis on autonomy
  - Collision Avoidance
  - Station Keeping
  - Area scanning
- We might host 2020





# Competitions - Robosail

## RoboSail

- RC Laser Hulls
- Everyone uses same boat
- Åland Islands, Finland sometime in May



# Competitions – Marine Autonomy Challenge

- Motorboat Competition
- Sponsored by L3 ASV
- Open to UK Universities
- Locate “litter” in the water
- Teams given hull and motors
- Was supposed to be August last year, cancelled in June



# Plan for this year

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- RC laser competition – Mid November
- Weekly theoretical/skills sessions
- Fix Kitty, Improve Dewi
- New boat?
- Visit Coventry Uni, go to a Raspberry Jam
- Go to all the competitions: RoboSail, Sailbot, MAChallenge, WRSC



# Mini RC Laser competition



- Teams of 4 or 5 people
- Polystyrene RC laser hull
  - Raspberry Pi computer
  - Captain Morgan board
  - Standard AberSailbot software
- Race November 16<sup>th</sup>/17<sup>th</sup>

# Thanks for Listening!

Tell us when you're available:  
<https://tinyurl.com/abersailbot-times>

Join our mailing list and Slack:  
<https://abersailbot.co.uk/joinus>