**Python resources**

Video

* <https://www.youtube.com/watch?v=HBxCHonP6Ro&list=PL6gx4Cwl9DGAcbMi1sH6oAMk4JHw91mC_> (thenewboston)

Book

* <https://learnpythonthehardway.org/book/>

Course

* <https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-00sc-introduction-to-computer-science-and-programming-spring-2011/>
* <https://www.codecademy.com/learn/python> (very slow and wouldn’t personally recommend)

Practice Problems

* HackerRank (also have good tutorials).
  + 30 days of code is quite good (you can easily cover it in 1-2 days)
* http://www.spoj.com/problems/basics/

PyGame Resources

* <https://inventwithpython.com/makinggames.pdf> (book that I personally used and recommend)
* <https://www.youtube.com/watch?v=ujOTNg17LjI> (video series)
* <https://www.youtube.com/watch?v=1FekDMDome4> (How to install github on windows)

**We expect students to have covered the following topics within Python in their own time prior to the summer school beginning**

* Variables
* Different data types (Boolean, integers, floats etc)
* Strings
* Loops
* ‘if’ statements
* Functions
* Lists
* Classes (advanced)

**JavaScript Resources**

Video

* <https://www.youtube.com/watch?v=fju9ii8YsGs>

Book

* <http://bdcampbell.net/javascript/book/javascript_the_good_parts.pdf>
* <http://eloquentjavascript.net/Eloquent_JavaScript.pdf> (more technical)

Course

* <https://www.codecademy.com/learn/javascript>
* <https://www.coursera.org/learn/duke-programming-web>

Practice

* Same as Python

Extras

* <http://microbit.org/> (we’ll use this for coding the robots)