Workshop / Tutorial (ICSB2024)

W5: Crash course in Python for Biology

Instructor(s) of the workshop / **Tutorial**:

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Time duration: **3 hrs**

Abstract : **Python will be introduced from the angle of a Turing-complete language to provide a general orientation to programming. This includes a discussion of its repertoire of data types, operators, and programming constructs such as conditionals, iteration, functions and classes. Following this a brief introduction to compound data types in Python will be provided (1 hour). This sets the stage for solving problems in regular expressions and working with the biopython library (1 hour). Learning problems will be motivated via a taxonomy, and representative algorithms discussed with Python implementations (1 hour). This will rely on the scikit-learn lib and illustrate regression, classification, and clustering approaches.**

Prior requirement: **Some knowledge of any programming language may be necessary to derive the maximum benefit from the workshop.**

Do participants need to bring personal laptop? **Yes**