Algorithmic Approaches for Biological Data, Lecture #10

Katherine St. John

City University of New York
American Museum of Natural History

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Outline

- List & Strings
- Lists, Tuples, & Arrays
- `numpy` and arrays

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- Example:

```
s = "I+love+Python"
words = s.split("+")
newS = " ".join(words)
```

In Pairs

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Assume that `data = f.read()`

- Replace all tabs in `data` with 4 spaces (many ways to do this).
- Count the number of lines in `data`.
- Replace all the newlines with a space.
- Count the number of words in data.
- Capitalize the first letter of every word in data.

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    `vector = np.array([3.4,5.6,9.8])`
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  - `np.linspace(start, stop, n)`: creates an array of n numbers evenly spaced between start and stop.

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- ndim gives the number of dimensions of the array.
- shape gives the size of each dimension.

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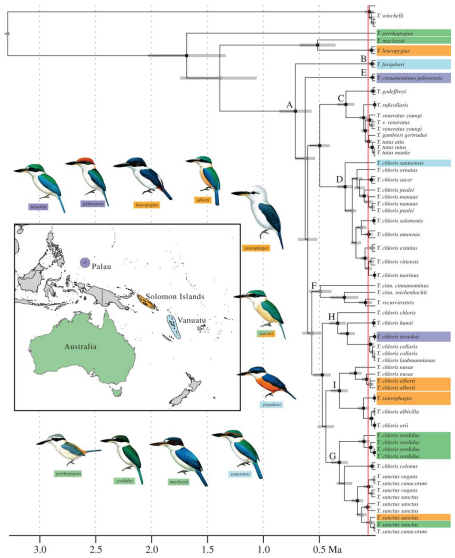
Recap



Anderson *et al.* 2014

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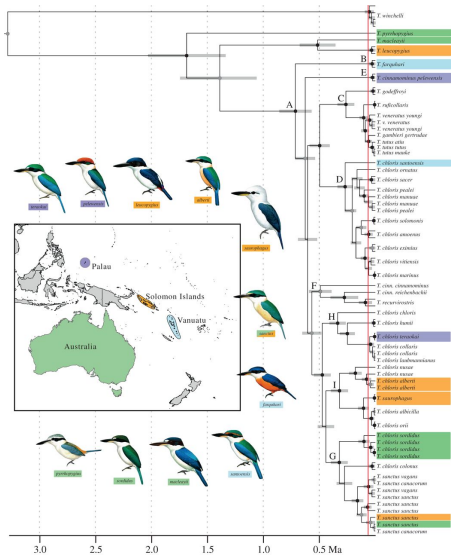

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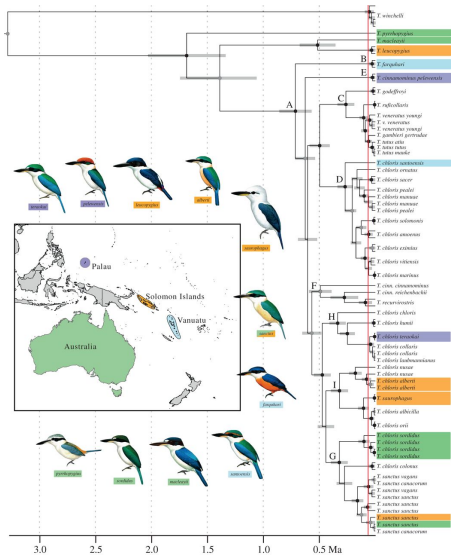

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