What I would like to see in NumPy

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Keep an eye on the foundation
Stuff I want in NumPy
It’s about time
Seriously

- Finish date-time
- Missing-data (especially the bitpattern)
- Enumerated Data Types
- Geometry Information (ala DataArray)
- Group By Functionality
- Computed (Derived) Fields
- Dtype specification with class notation
Class-defined Dtypes

```python
@np.dtype
class Person(np.Dtype):
    weight = np.Float(64)
    age = np.Int(16)
    name = np.Str(100)
    gender = np.Enum('male', 'female')

    def isfat(self):
        return self.weight > 200

    def isold(self):
        return self.age > 39
```
Even more...

- Indexes for NumPy arrays (especially structured)
- Generator arrays (delayed computation)
- Arbitrary offset arrays (including linked data structures)
- Global Array definitions
- Foreign-Key (Reference) Data-types (...joins)
- SQL integration (SQL interpreter and DB-API integration)
- Reactive arrays (event registration on setting)
- Dimensions defined by “fields” (thanks Corran)
- Data structures from Pandas that should be shared...
- And after Peter’s Talk... Functional iterators....
Finally --- Next generation Ufuncs