

Fwrap: Wrap Fortran in C, Cython & Python. Automagically.

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Features

First release (very soon!) will support 'nice' F77 plus a few extra things:

- All intrinsic types, both scalar and array arguments.
- Basic dtype declaration syntaxes: `integer(kind=4)`, `complex*16`
- `dimension(n1, n2)`, `dimension(:, :)`, `dimension(34, *)` supported.
- Automatic Fortran \Rightarrow C type mapping detection.
- Can use wrappers from C, Cython and Python code.



Planned features

- Module-level data
- User-derived types

```
TYPE PARTICLE
```

```
  INTEGER(KIND=8)  :: ID
```

```
  REAL(KIND=8)    :: X, Y, Z
```

```
  REAL(KIND=8)    :: VX, VY, VZ
```

```
  INTEGER(KIND=8), DIMENSION(NN)  :: NEIGHBORS
```

```
END TYPE PARTICLE
```

- C, Cython & Python callbacks (almost no overhead for C/Cython callbacks)
- Fortran module (with some constraints, conventions and directives) \Rightarrow Python extension type.



`http://fwrap.sourceforge.net/`

`http://bitbucket.org/kwmsmith/fwrap-dev`

Fwrap sprint Friday and Saturday, come and join us if you like.

