# Ming: An ORM-like Layer for MongoDB



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(I'm the guy giving the talk, not the science fiction dictator depicted above)

## What is MongoDB?

- Document-oriented database
  - a.k.a. Schema Free, noSQL
- High-performance
- Open Source
- Indexes
- Reasonable Query Language
- Support for MapReduce

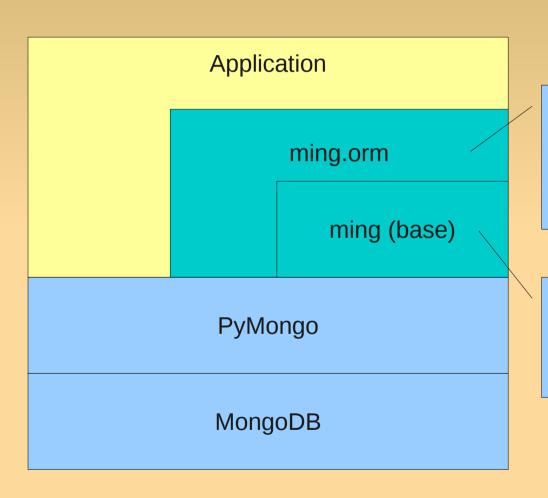
## Python and MongoDB

- Main package: PyMongo
- Need to run mongod server
  - I usually use mongod –dbpath /path/to/my/database
- Quick demo

#### That was easy....

- Schema-free is great for prototyping...
- But your database isn't really schema-free; it's schema-implicit
- Somewhere there's code that expects 'author', 'date', etc., to be part of a blog post – but nothing in the code specifies this.
- Ming to the rescue!

# What is Ming?



- Unit-of-work Pattern
- IdentityMap
- Relations between objects

- Schema Management
- Migrations Support

# **Base Ming Demo**

#### Ming.orm Features

- Unit-of-work
  - Flush changes all at once to MongoDB
  - No need to manually .save() objects
- IdentityMap
  - If an object is the same in the DB, it's the same in memory as well (under Python's 'is' operator)
- Relations between objects
  - Allow one-to-many and many-to-one relations via "foreign keys"

# Ming.orm Demo

#### **For More Information**

- Project Documentation
  - http://merciless.sourceforge.net
- Project Development
  - http://sourceforge.net/merciless/
- MongoDB
  - http://www.mongodb.org

# Questions?

