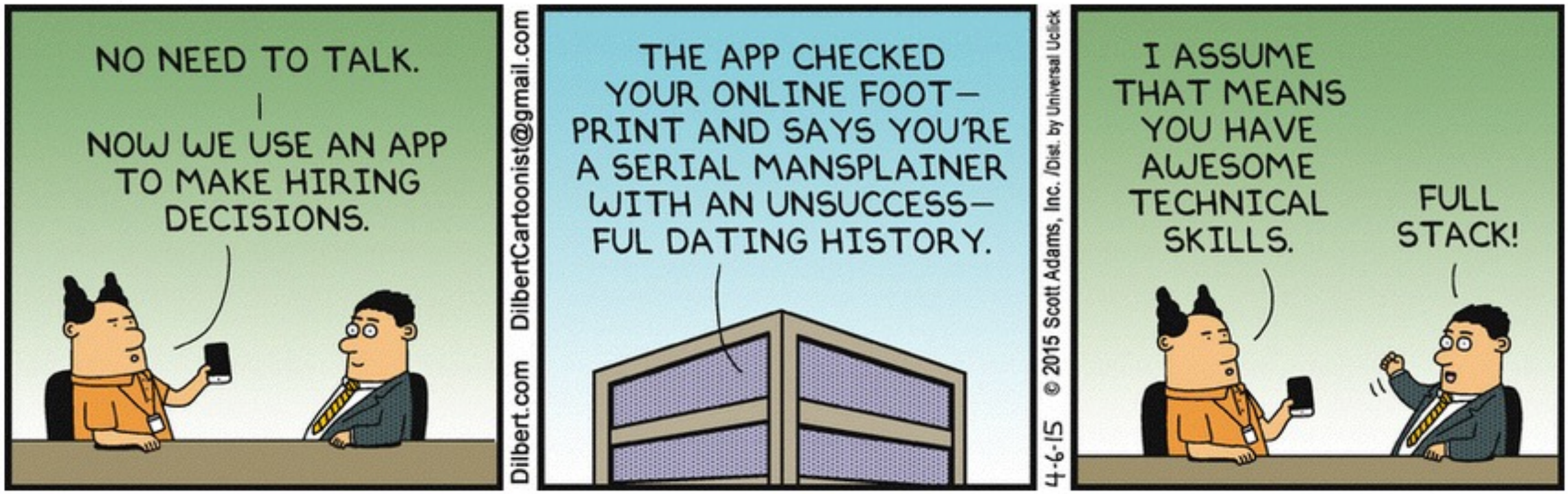
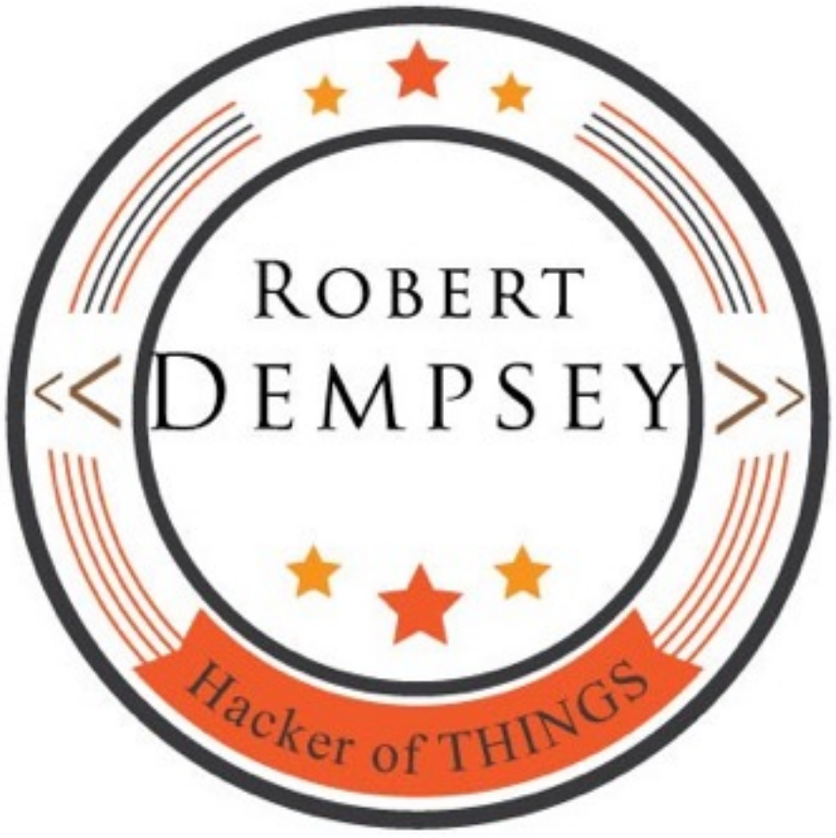
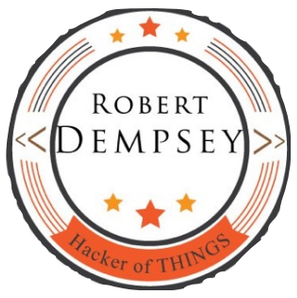
Using PyParsing For Web Scraping, Application Control and Data Wrangling

Robert Dempsey
robertwdempsey.com

Monday April 06, 2015





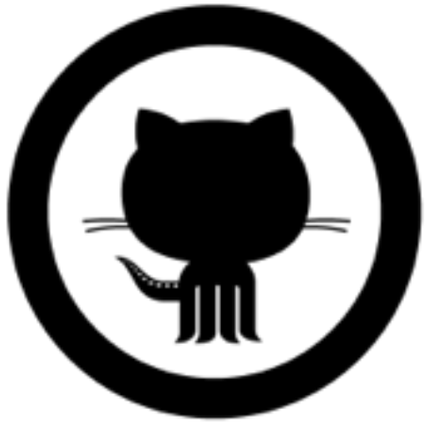


robertwdempsey.com

rdempsey

robertwdempsey

rdempsey



https://github.com/rdempsey/pyparsing-dcpython

PyParsing

An alternative approach to creating and executing simple grammars

- Extract data from a text file or web page
- Use in applications to allow for user-defined commands or search strings
- Regex makes your brain hurt and you want an alternative

Install It

Latest version: 2.0.1

- easy_install pyparsing
- pip install pyparsing

Basic PyParsing App

- Import names from PyParsing
- Define the grammar
- Use the grammar
- Process the results

Elements of a Grammar

- Word
- Literal
- OneOrMore
- oneOf
- alphas

Hello, World!

Parsing User Input

Web Scraping


Web Scraping

Scrapy

scrapy.org

Web Scraping With Scrapy

Web Scraping Caveats

- Always observe the website's terms of service

Built Like This

- Specify data (Item)
- Create the spider (Spider)
- Find your data elements (XPath Selectors)
- Extract the data
- Process the data

Data Acquisition and Wrangling with Python Workshop

Date & Time:
Saturday, May 9th 2015 9am-5pm

Location:
640 Massachusetts Avenue NW
Washington, DC 20001

Regular Price: $300
Early Bird Price: $250
(expires 4/25/2015)

REGISTER

Overview

Eighty percent or more of the time spent on data science projects is spent acquiring data, cleaning it, and preparing it for analysis. That data can come from a variety of sources, including APIs or individual web pages. However, not all data is created equal. Once we have automated its acquisition, much of it requires lengthy cleaning and formatting before it can be used. In this course you will learn how to obtain, clean, and mashup data in preparation for analysis.

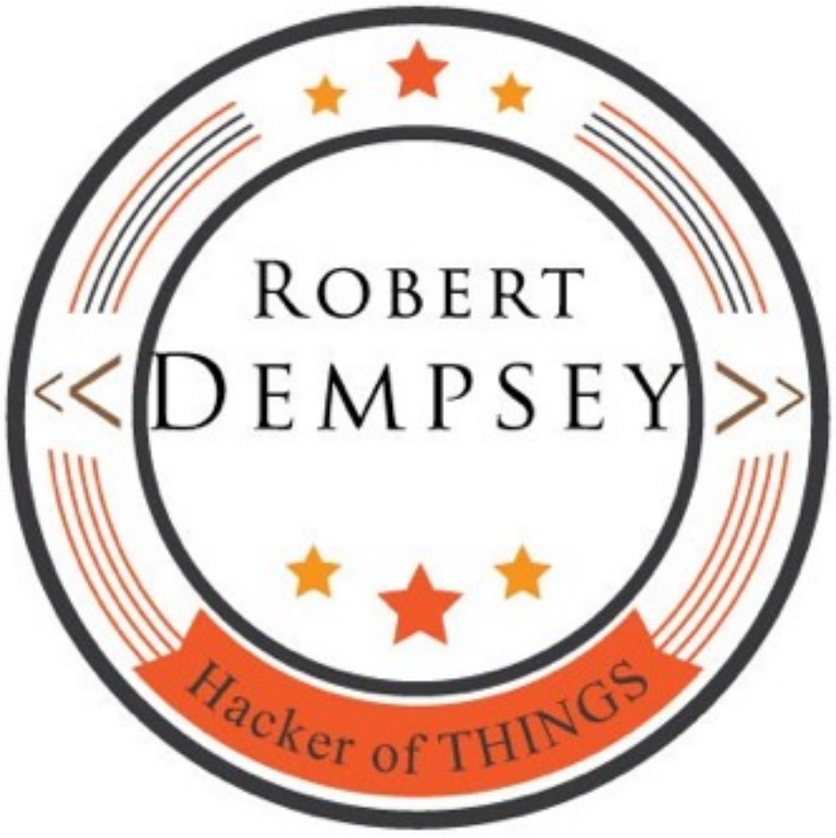
Our focus will be on achieving two goals:

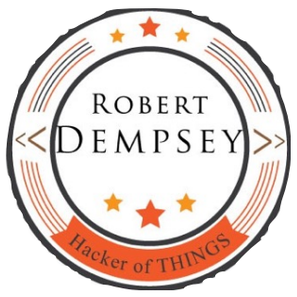
1. Understanding more about your customers from their social profiles.
2. Pulling data off the web (screen scraping) for market research and getting it into a database.

Prerequisites

- Basic programming knowledge of Python
- Anaconda with Python 3.4 (for Part 1)
- Anaconda with Python 2.7 (for Part 2)
- MySQL 5.7
- iPython Notebook (included with the Anaconda install)

http://robertwdempsey.com/ddl-datawrangling

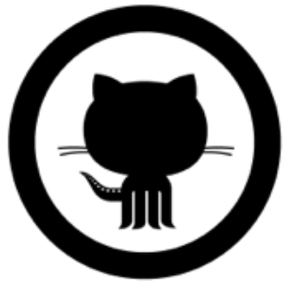




robertwdempsey.com

rdempsey

robertwdempsey



rdempsey