

**Self Taught  
Junior Level Python Programmer  
Sample Survey of Projects**

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**Python  
Can I dazzle you with quantity?**

**Domain:** Data Analysis  
**Projects:** Corn Futures, California Lottery  
**Main Libraries:** sqlite3, csv, pandas, matplotlib  
**Highlights:** data IO and prep, importing to database, implementing complex algorithms, analyzing, and graphing output

**Domain:** Web Ripping  
**Projects:** reddit, imgur, sequential page down-loader  
**Main Libraries:** PRAW, urllib2, re  
**Highlights:** following qualified links, saving, analyzing, and graphing data

**Domain:** Trees & Graphs  
**Projects:** local computer, remote websites  
**Main Libraries:** network x, custom classes, os  
**Highlights:** collect data (get links, files), determine nodes (make graph), scan (for abnormality, virus), map the graph, modify src links in place

**Domain:** images filters and pattern creation  
**Projects:** Posterize, Emerald Eyes, ZebraStripes, watermarks, batch processing, dynamic debugging, word tiles, and lots more  
**Main Libraries:** Numpy, IrfanView, ImageMagick, Scipy, Skimage,  
**Highlights:** image IO, array manipulation (overlay, difference, modification), sub-process management (calling C packages)

**Domain:** Genetic & Procedural Programming  
**Projects:** MutaGenetics Football™ and maze creation  
**Main Libraries:** numpy  
**Highlights:** management and manipulation of complex data structures to mimic simplistic football plays, create random mazes

## **Miscellaneous Projects**

Website Creation: jinja2 templates and hand coded

Receipt Processor: data munging, text to csv

Recurse: html to python and back again

Eight Queens: logic with a nice image as the output

Craig Reynold's Boids: logic with a gif as output

Conway's Life: logic, images and gifs

Mandelbrot: explore limits of computational resolution

And Many More: Kivy, 7z Batch, functional, Lisp like, generators, etc.

Mastery of Python Standard Library

Working Knowledge of Many Third Party Libraries

Introductory Knowledge of Diverse Domains

## **Python is Just the Tip**

To plunge this deep into Python has required extensive forays into other knowledge domains, but since listing keywords might imply mastery, I shall not bother, suffice to say, I appreciate beautiful code, and in the end, that is my goal, to write, manage, and immerse myself in ever more beautiful code.

## **In Other News**

Business Experience: 25 years project administration and sales. I have every confidence I will be managing code before long.

Writer: numerous unpublished novels, I will happily match my ability to hold a world of abstraction in my head and juggle it about just for fun with the best of them.

Economics: I am a casual reader; one has to have a hobby.

## **Modesty? Why? Does it Pay?**

I am easily in the top tier of those looking for an Entry Level Python Programming Position (and yes, I am humble enough to realize that entry level is where I belong).

However, I fully expect to move into a Team Leader / Project Management Position as soon as I understand the nuances of the production environment.