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# Resume: Wes Turner

[westurner.org/resume](http://westurner.org/resume)

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# 1 Summary

## Systems Engineer

**Objective:** Develop and contribute my skills and experience to achieve organizational mission objectives

*What do I want to do?*

- Collaborate with a **team** of bright, motivated individuals
- **Learn** with agile, iterative, continuous integration and deployment
- Develop **applications, distributed systems, and portfolios**
- Secure web applications
- **Build** secure distributed systems
- **Create** beautiful interfaces

Experience:

- Independent web design and development entrepreneur
- Objective focused organizations
- Web applications / systems developer for university security organization
- Web applications / systems developer for hospital
- 10+ years Linux
- 5+ years Python

## 2 Employment

### 2.1 2009-2010: Programmer Analyst I @ UNMC

Section of Cardiology

Knowledge Engineering Group (KEG)

University of Nebraska Medical Center (UNMC)

Initially contacted by and contracted through Kelly IT Resources

Omaha, Nebraska, USA

Feb 2009 - Oct 2010

Supported **UNMC** and **NMC** Doctors, Nurses, and Patients

Overhauled a Python web app used for filing and printing medical orders

- Scoped, designed, coded, tested, and documented iterative releases
- Managed release and deployment to dev/test/prod architecture
- Instrumented and optimized for security, stability, and performance
- Supported application troubleshooting and maintenance

Increased productivity by shortening stakeholder and DevOps feedback loops

- Introduced XP, Scrum, Trac, Agilo, Mercurial, Test-driven Development, Nose
- Added an in-application feedback form
- Wrote user stories and functional/unit tests for new and existing specs
- Designed, tested, developed, and implemented prioritized user stories
- Introduced Continuous Integration; Hudson, Shell Scripting

Trained team members

- Refactored out of Zope towards WSGI and what is now Pyramid
- Introduced JSON API and cross-browser compatible JavaScript framework
- Identified and mitigated CWEs to reduce surface
- Consolidated into a single-page-application
- Extended and refactored interface; YUI GUI
- Created command line utility to simplify application management
- Added docstrings with parameter and return value specs; ReStructuredText
- Drafted narrative systems documentation; ReStructuredText, Sphinx

#### Standardized data model

- Extracted, mapped, and migrated MySQL / document object schema; SQLAlchemy
- Implemented transactions for consistency and referential integrity
- Implemented an integrated task queue; Celery, AMQP
- Wrote online and offline MySQL reports

#### Semantic web

- Prototyped RDFa templates; Jinja2 block recursion
- Developed an OWL-DL ontology based on DOAP, FOAF, and RDFS to describe a systems component graph and metadata; Sesame, Redland, Protg, Pellet, Turtle (TriG)
- Created tool to generate documentation reports from SPARQL queries of a component graph; RDFLib, FuXi, ReStructuredText

#### End of cycle resignation

- Hospital will be very satisfied with integrated Epic/MUMPS adoption
- Amicably resigned October 2010

## 2.2 2007-2008: Web Developer @ UNOmaha

Nebraska University Consortium on Information Assurance (NUCIA)

University of Nebraska at Omaha (UNO)

Peter Kiewit Institute (PKI)

Omaha, Nebraska, USA

January 2007 - March 2008

#### Python Web Developer

- Scratched, forked, and extended another Content Management System
- Collaborated with graphic designer
- Designed and developed events calendar app
  - Created hCalendar microformat templates
  - Wrote iCal download views
  - Integrated Simile Timeline widget
- Extended MediaWiki syntax parser with JavaScript AJAX XHR
- Learned about web application and OS security
- Python: Django 0.97-1.0, Plone
- JavaScript: jQuery, Dojo
- MySQL, PostgreSQL

#### Systems Infrastructure Management

- Intrapreneured “NUCIA Web Services” web systems acronym moniker
- Partitioned and virtualized a series of intranet applications
- Contributed platform to Vulnerability Discovery course

## 2.3 2005-2006: Systems Developer @ D-Line Marketing

Internet Marketing Firm

V Internet Enterprises after reorganization

Ballwin, Missouri, USA

October 2005 - June 2006

#### Systems Developer

- Prototyped video chat subscription logic; Java, Javascript, PHP
- Maintained VPN link to work remotely from school
- Tested various streaming services: Darwin Streaming Server, FMS, Red5

## **2.4 2004-2004: Dietary Aid @ Autumn View Gardens**

Assisted Living Center  
Bethesda Healthcare  
Ballwin, Missouri, USA  
May 2004 - December 2004

### **Dietary Aid**

- Took order for and served residents and guests
- Served 6am breakfast, lunch, and 5 course dinners
- Served occasionally disgruntled residents with a smile
- Learned the true meaning of Service
- Resigned due to early HS graduation

## **2.5 2003-2004: Systems @ V Internet Enterprises**

Internet Marketing Firm  
Ballwin, Missouri, USA  
May 2003 - October 2004

### **Systems Administrator / Systems Programmer**

- Supported day-to-day operations; RedHat Linux, DNS, Network Troubleshooting
- Developed affiliate conversion tracking system; PHP, MySQL
- Various automation tools: VB6, VB.net, SOAP, and XML-RPC

## **2.6 2002-2007: Independent Web Consultant**

Small Business Consulting  
West County; St. Louis, Missouri, USA

- Desktop Support
- Web Design and Development
- LAMP CMS Hosting, Configuration, Templating
- Custom Web Application Development: Web Frameworks

### **Clients:**

- 2002: East Coast Pizza
- 2003: Gifts St. Louis
- 2003: LHS Wrestling
- 2004: Soda Jerks
- 2006-07: Superior Pro Painting; PHP, MODx, Python, Django

## **2.7 2002-2003: Construction Assistant @ East Coast Pizza**

Family-owned Pizza and Pasta place with Calzones and Strombolis  
Now Under New Management  
Chesterfield, MO, USA  
May 2002 - May 2003

- Construction Assistant: Oven-brick carrier and arranger, Tiler, Sweeper
- Cat-5 terminator
- Web Designer
- Web Developer

## 2.8 1996: Windows 3.1 Support

West Omaha, NE, USA

- Helped neighbors fix their Windows 3.1 desktop QuickBooks installation
- QBasic, Dr. Sbaitso

## 3 Education

### 3.1 Omaha, NE, USA; St Louis, MO, USA

- Night Owl
- RPMs on 3.5" diskettes, Corel Linux, BeOS
- *Gifted* programs, summer classes, work-school program; graduated early
- Forensics: Policy Debate, Extemporaneous Speaking
- AP Computer Science B, AP Statistics 4
- QBasic, HTML, C++ for Dummies, PHP, IDLE, VB6, Java, VB.net, Ruby, Python

### 3.2 2007-2010: UNOmaha

University of Nebraska-Omaha

BSc Management Information Systems (MIS)

- *MISSO: President*
- *AISSC: Student Representative*
- *Nebraska Humane Society Nonprofit Consulting*
- Learned through collaboration by collaborating to publish Principles of Collaboration, Second Edition
- Intro C++, Perl, Oracle SQL, Systems Analysis, Distributed Systems
- Outstanding Technical Writing course remaining

### 3.3 2010-2014: Online Learning

Research Topics

- DevOps: SaltStack, Puppet, Cobbler, OpenStack
- Graph Theory: wrote a better fdupes with NetworkX
- Big Data: MapReduce, Pregel, Hadoop, Cloudera
- Linked Data: Triplestore CAP, Federation
- Go, Rust, Scala, Haskell
- Bioinformatics: <http://rosalind.info/users/westurner/>

Courses

- <http://class-central.com>
- <https://www.khanacademy.org/profile/westurner1>
- Introduction to Finance
- Machine Learning
- Introduction to Web Accessibility

## 4 Projects

See: <https://westurner.org/wiki/projects>

## 4.1 2007: Presense

Social Media Aggregation Concept & Gaussian Chart Generator

UNOmaha: Graphical User Interface Design

Team of three

Responsible for concept, design, coding; presentation lead

- Google Charts API
- Prior to Task Queues
- BeautifulSoup
- Python, JavaScript, CSS, XHTML
- Django, jQuery, jQote, YUI CSS Templates
- Google AppEngine: Python

## 4.2 2007: Eagle Financial Life Insurance Quotes

Insurance Quote Models, Views, and Templates

UNOmaha: Distributed Systems

Team of four

Responsible for design, coding; presentation lead

<https://bitbucket.org/westurner/eaglefin>

- Python, JavaScript, CSS, XHTML
- Django, 960.gs
- Google AppEngine: Python

## 4.3 2009: Nebraska Humane Society Nonprofit Consulting

Social Web Team

Social Media Consulting Recommendations Report

Adoption Listings Crawler & Website Prototype

UNOmaha: Special Topics Consulting

Merged teams of six and then ten

Responsible for concept, design, coding; presentation lead

<https://nhs-adoptions.appspot.com>

<https://bitbucket.org/westurner/nhs-social-web>

- Created collaboration plan: Team Site, Mailing List; Google Sites and Groups
- Researched strategies and metrics for maximizing social media goodwill
- Developed adoption listings harvester and static page templates
- Google AppEngine: Python (before the introduction of Blobstore)
- Task Queues, JSONP API
- Python, Django, JavaScript, jQuery, CSS, 960.gs, XHTML

## 4.4 2009: Tiger Solutions Web Based Course Management System

Django app for Listing Available Courses and Scheduling Course Requests

UNO: Systems Analysis & Design / Systems Design & Implementation

Team of four

Responsible for design, coding, and presentation

<http://code.google.com/p/wbcms>

<https://bitbucket.org/westurner/wbcms>

- Python, JavaScript, CSS, XHTML
- Django, YUI Layouts

- MySQL, SQL Server ODBC
- SVN
- Theory X but really Theory Y

## 4.5 2009-2010: UNO MISSO President

UNO Management Information Systems Student Organization

- Hosted monthly industry speakers
- Developed an approach for social media
- Created [facebook.com/UNO.MISSO](https://facebook.com/UNO.MISSO)

## 4.6 2009-2010: AIS Student Chapters Representative

Association for Information Systems Student Chapters

- Worked with AIS Student Chapter Presidents to found AISSC
- Created [facebook.com/AISSC](https://facebook.com/AISSC) and [twitter.com/AISSC](https://twitter.com/AISSC)
- 2010 AIS Student Chapters Outstanding Communications Award

## 4.7 2010: Help Haiti Project

WordPress Instance for Haiti Earthquake Awareness

UNOmaha: Managing in the Digital World

Three geo-distributed teams of four to five

<http://code.google.com/p/helphaitiproject>

Responsible for project management

- Something like Theory Y
- User Stories as Tickets
- WordPress, Extensions

## 4.8 2010: Workhours

Personal project accounting and log processing tool

- Events (bookmarks, log entries, mtimes) to tuples to [SQL]
- Infinite-scrolling tables
- Pyramid, SQLAlchemy, Pyramid Restler REST API, DataTables

## 4.9 2010: Cloud Provisioning Research

Survey, evaluation, adaptation, and integration for DevOps efficiency

- Configuration Management
- Performance Monitoring
- Cobbler, Vagrant, Puppet, SaltStack, Ansible, Nagios
- DHCP, DNS, Apache, TLS

## 4.10 2011: Flowstat

Pyramid polyglot sandbox

- Agglomeration of utilities: prime numbers, spectrum bands
- RDF integration: RDFLib, surf, virtuoso, deniz, SPARQL
- Pyramid + SQLAlchemy REST API

## 4.11 2012: Self Directed Learning

<https://westurner.org/self-directed-learning/>

- Autodidacticism
- Open Tools, Data, and Analysis for STEM Learning (“STEM Labs”)
- Science, Technology, Engineering, and Mathematics

## 4.12 2012: Pycd10api

REST API wrapper for ICD 10 CM and PCS XML files

<https://github.com/westurner/pycd10api>

- Python, Pyramid, Cornice, lxml, XPath

## 4.13 2013: Redem

Personal reddit data liberation backup utility

<https://github.com/westurner/redem>

<https://westurner.org/redditlog/>

- Reddit reader: comments, submissions, links
- Fetch last 1000 comments from Reddit
- Aggregate into static sortable and filterable HTML tables
- Python, PRAW, Requests, Jinja2, Bootstrap 2, DataTables

## 4.14 2014: Health-marketplace

Health marketplace web application

<https://github.com/westurner/health-marketplace>

- Python, Django, Django-nonrel, Google AppEngine

## 4.15 2014: Menuapp

Restaurant menu web application with [schema.org](http://schema.org) types

- Developed for a cupcake bakery FoodEstablishment
- Python, Django, Django-nonrel, Google AppEngine
- REST API: Django TastyPie



## 4.16 2014: Healthref

Health reference demo application

<https://github.com/westurner/healthref>

- Generates good HTML from an RDF Graph in Turtle Syntax
- Python, RDFLib, Jinja2, Pygments, n3pygments

## 4.17 hello\_world

[https://github.com/westurner/hello\\_world](https://github.com/westurner/hello_world)

Language basics / code samples in C++, CoffeeScript, Cython, Go, Java, Javascript, Python, and Ruby

## 4.18 Dotfiles

<https://westurner.org/dotfiles/>

<https://github.com/westurner/dotfiles>

<https://github.com/westurner/dotvim>

- Python package with documentation
- Configuration set for Bash, ZSH, Python, IPython, I3WM
- Configuration set for Vim

## 4.19 Open Source Contributions

Primarily small contributions here and there to show my appreciation.

See: <https://westurner.org/wiki/contributions>

## 5 Contact Information

Homepage: [westurner.org](http://westurner.org)

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Twitter: [@westurner](https://twitter.com/westurner)