

## Summary

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A former physics researcher/instructor and information systems instructor who first started developing web applications way back in 1993.

Currently working as an independent consultant offering web application development and support with an emphasis on deployment and optimization of high performance open source solutions, including various combinations of Zope, Plone, Deliverance, ContentMirror, Repoze, Django, Apache, Nginx, Varnish, Squid, Memcached, Balance, and Haproxy.

A member of the Plone CMS professional community since 2005 ([plone.org](http://plone.org)), co-author of Practical Plone 3 (published by Packt), long-time contributor to various Plone projects and current release manager for the CacheFu product bundle and [plone.app.caching](http://plone.app.caching).

A charter member of the Central Oregon Web Professionals Usergroup and a charter member and chair of Tech Alliance: Central Oregon's Tech Association.

## Websites/Clients

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### **digital marbles**

(my consultant hat website)  
<http://digitalmarbles.com>

### **Plone Foundation**

(caching optimization of [Plone.org](http://plone.org))  
<http://plone.org>

### **netCorps**

(standardize buildout templates and deployment processes, and misc. subcontract work)  
<http://netcorps.org>

### **Groundwire** (formerly ONE/Northwest)

(performance audit and server troubleshooting)  
<http://groundwire.org>

### **Cascadia Green Building Council**

(website theming and custom programming/troubleshooting)  
<http://cascadiagbc.org>

### **Green Broker**

(website theming)  
<http://www.cascadiagbc.org/green-broker>

### **Living Future**

(website theming and custom programming)  
<http://www.cascadiagbc.org/living-future>

### **Living Building Leader**

(website theming)  
<http://www.cascadiagbc.org/lbl>

### **Bering Sea Elders Group Advisory**

(website theming)  
<http://beringseaelders.org>

### **Education for Liberation Network**

(custom programming/troubleshooting)  
<http://edliberation.org>

### **Free Minds Free People**

(website theming)  
<http://freemindsfreepeople.org>

### **McKay Cottage Restaurant**

(server maintenance, website theming, and custom programming/troubleshooting)  
<http://themckaycottage.com>

### **Tech Alliance**

(website theming and custom programming)  
<http://techallianceCO.org>

### **Bend Knit Up**

(website theming and custom programming)  
<http://bendknitup.org>

### **Conservation Council of North Carolina**

(website theming)  
<http://conservationcouncilnc.org>

### **North Carolina Farm Transition Network**

(general troubleshooting)  
<http://ncftn.org>

### **Disability Rights Oregon**

(general troubleshooting)  
<http://disabilityrightsoregon.org>

### **Building Ecology**

(server migration/update)  
<http://buildingecology.com>

### **Equality North Carolina**

(general troubleshooting)  
<http://equalitync.org>

### **Z. Smith Reynolds Foundation**

(general troubleshooting)  
<http://zsr.org>

**Oregon's Immigrant Rights Coalition**

(general troubleshooting)  
<http://causaoregon.org>

**The League of Young Voters**

(custom programming and custom programming/troubleshooting)  
<http://theleague.com>

**AMIGOS: Amigos de las Americas**

(general troubleshooting)  
<http://amigoslink.org>

**International Society of Indoor Air Quality and Climate (ISIAQ)**

(server migration/update and website theming)  
<http://isiaq.org>

**Portland: Jobs with Justice**

(server migration/update and website theming)  
<http://jwjpx.org>

**Coosa River Basin Initiative**

(general troubleshooting)  
<http://coosa.org>

**McKenzie River Trust**

(general troubleshooting)  
<http://mckenzieriver.org>

**Unique 3D Digital**

(server maintenance, ecommerce set up, and general troubleshooting)  
<http://unique3ddigital.com>

**Avatar Studios**

(server maintenance, website theming, and custom programming)  
<http://avatarstudios.net>

**OlympusNet**

(general troubleshooting)  
<http://olympus.net>

**Honeywell Aerospace**

Formerly Honeywell Airport Systems and Obstruction Lighting Systems.  
(Intranet and database development/maintenance, and performance optimization)  
<http://airportsystems.honeywell.com>  
<http://oblighing.com/>

*(more examples available upon request)*

## History

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**Web Application Developer**

Self-employed, dba “digital marbles”, Bend, Oregon (Jun. 2005 – present)

- Web application development. Toolbox includes several programming and scripting languages and development environments including Python, Zope, BlueBream, Miva, Javascript, PHP, Perl, and Frontier.
- Server and application support. Toolbox includes Unix-like operating systems (BSD, FreeBSD, Linux, and OSX), Apache web server, Nginx web server, Zope application server, and several server utilities developed in-house.
- High performance web optimization and deployment. Toolbox includes Squid, Varnish, Balance, Pound, Haproxy, and various benchmarking and performance measurement utilities.

**Chief Technical Officer**

Digital Visions Group, San Diego, California (Jan.1995 – Jun. 2005)

- Technical asset management, systems administration and project management.
- Most projects involved the development, deployment and support of various online databases and applications built on multiple technologies including MySQL, PostgreSQL, Zope, Python, Miva, PHP, Perl, and Frontier.
- Developed several applications and utilities including a content management system based on the Frontier/Usertalk platform, a partner/gallery application for the Miva Corporation using the MivaScript language, and a technical asset management application using the Zope application framework.

**Physics & Information Systems Instructor**

Cuyamaca College, El Cajon, California (Jan. 1994 – May 2006)

- Prepared and taught *Conceptual Physics* course (lecture & lab)
- Prepared and taught *Introduction to the Internet* course (lecture & lab).

### **Physicist/AMTS-Specialist**

Computer Sciences Corporation, San Diego, California (June 1993 – Dec. 1996)

- Supported the Research, Development, Test and Evaluation Division of the Naval Command, Control and Ocean Surveillance Center (NCCOSC NRaD), Code 52.
- Developed UV/VIS/IR fiber optic/laser systems, computer interfacing, and software.
- Developed several PC-based real-time data-acquisition systems using Optical Multichannel Analyzers (OMA), Linear Photodiode Arrays, and Charge Coupled Devices (CCD).
- Developed several sensors including a hydrocarbons sensor (fluorescence) used successfully in both seawater and soils and a chlorinated solvent sensor (raman scattering).
- Developed signal processing techniques to filter sample fluorescence as outlined in a paper presented at the Fourth International Symposium for Field Screening Methods for Hazardous Waste and Toxic Chemicals, February 1995, Las Vegas, NV.

### **Research Assistant**

San Diego State University Foundation, San Diego, California (June 1991 – June 1993)

- Provided support for the Cone Penetrometer project at the Naval Ocean Systems Center (NOSC) aimed at developing chemical sensors.
- Conducted research investigating ultraviolet transmission and absorption properties of silica optical fiber proposed for a dual wavelength remote fiber optic based chemical sensor as detailed in "Optical Considerations in the Development of a Fiber Optic Fluorometer," a physics masters thesis completed by Gregory Theriault and in a paper presented at OE/Fibers '92, September 1992, Boston, MA.

### **Education**

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B.S. in physics with emphasis in condensed matter, San Diego State University, 1992.

M.S. in physics (ABT), San Diego State University

### **Publications**

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V. Williams, R. Newbery, S. Knox, J. Stahl, M. Aspeli, et al. "Practical Plone 3: A Beginner's Guide to Building Powerful Websites" Packt Publishing (2009).

R. Newbery, P.A. Mosier-Boss, and S.H. Lieberman, "Development of a Cone Penetrometer Deployed Solvent Sensor Using a SERS Fiber Optic Probe." *Analytical Spectroscopy* (1997).

P.A. Mosier-Boss, R. Newbery, S. Szpak, S.H. Lieberman, and J.W. Rovang, "Versatile, Low-Volume, Thin-Layer Cell for in Situ Spectroelectrochemistry." *Analytical Chemistry*. 68, 3277-3282 (1996).

P.A. Mosier-Boss, R. Newbery, and S.H. Lieberman, "Fluorescence Rejection in Raman Spectroscopy by Shifted-Spectra, Edge Detection, and FFT Filtering Techniques." *Applied Spectroscopy*. 49, 630-638 (1995)

P.A. Mosier-Boss, R. Newbery, and S.H. Lieberman, "Use of Edge Detection and FFT Filtering Techniques to Reject Fluorescence in Raman Spectra." *Proceedings Fourth International Symposium - Field Screening Methods for Hazardous Waste and Toxic Chemicals* (1995).

G.A. Theriault, R. Newbery, J.M. Andrews, S.E. Apitz and S.H. Lieberman, "Fiber Optic Fluorometer Based on a Dual Wavelength Excitation Source." *Proceedings SPIE Vol. 1796, Chemical, Biochemical and Environmental Fiber Sensors IV* (1992).