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## Summary

An experienced software developer well versed in modern development tools and practices. Experienced in web application design, database backed applications, and common web and network protocols at a programming level. Understand good web design principles such as REST, statelessness, and idempotency. Use modern development techniques including OO design, unit testing, and version control. Worked with customer and team members to plan, develop, and test projects. Delivered practical and secure solutions that met customer requests.

## Technical & Specialized Skills

**Databases:** MySQL, Sybase

**Languages:** bash, C, Javascript, Perl, and Python

**Operating Systems:** Linux, OS X, Solaris

**Platforms:** Apache, Zope

**Version Control:** CVS, Subversion, git

## Experience

### SPACE TELESCOPE SCIENCE INSTITUTE / IT DIVISION

**Senior Software Developer 2001-2014**

Supported the Space Telescope Institute and astronomical community through developing web applications, implementing new products in Zope, the Python based content management system, and adding user requested enhancements to the Institute web site.

- Debugged and patched problems with Zope Python internals, a complex and poorly documented code base.

- Made user requested changes to web site content, writing HTML, CSS, and Javascript to handle their requests.

- Developed application to collect conflict of interest reports and store them in MySQL database for administrative review. The application was delivered bug free, no users reported problems after delivery.

- Part of team that wrote performance appraisal reporting application in Java. Required encoding complex business logic about who could view and edit appraisals and appraisal state transitions as Java classes.

- Migrated the content of one Wiki to another by writing a Perl parser to convert the data format.

This significantly reduced migration time from Zope to Confluence.

- Added telescope performance metrics and their associated metadata to the web site through a Perl program, allowing astronomers to view telescope behavior over time.

- Modified Zope IP address handling to handle subnet masking after Institute address range had been reduced to require it.

- Generated nightly a photo gallery of Institute employees organized by department. It was produced by a program from information stored in LDAP and Active Directory.

- Developed web based phone directory application to search Active Directory for employees. One of the most widely used pages on the site.

- Kept astronomers informed of current research by writing web scraping script to report when their Institute astronomers had uploaded preprints to Arxiv.

- Kept website links current by writing link checking application. It parsed Apache log files, scraped curators web page, doubled checked the errors, and emailed curators about them.

- Supported and enhanced the Institute conference registration tool, resolving problems during Institute conferences..

- Performed code reviews to assess other employees' software for security vulnerabilities.

## Education

University of Maryland, College Park

Bachelor of Science

## Portfolio

Please view my software portfolio on github at https://github.com/Jinzang/