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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.

Technologies

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 - Web Developer 2001-2014

- Developed new Python software products for Zope, a content management system used at the Space Telescope.
- Debugged and patched problems with Zope Python internals, a complex and poorly documented code base.
- Wrote a conflict of interest reporting application. The application was delivered bug free, no users reported problems after delivery.
- Helped write a Java application used for performance appraisals. Required encoding complex business logic about who could view and edit appraisals during their life cycle as a state table.
- Wrote Perl parser that converted between formats, to automate migration from one Wiki to another, significantly reducing migration time.
- Developed front end code for these and other web applications using HTML, CSS, and JavaScript. Performed full stack application development.
- Designed and wrote sql databases to as a persistent store for web applications using normalization and referential integrity and aware of security issues, such as injection attacks.

Scientific Software Group - Application Developer 1990-2000

- Helped design and write the Calibration Database system, including the C code which added calibration files to the database.
- Wrote statistics analysis package for astronomers, converting a statistician's code into production quality code.
- Wrote the synthetic photometry (synphot) package, a large software package widely used by astronomers.

Education

University of Maryland, College Park

Bachelor of Science in Physics and Astronomy

References

Gladly provided upon request.