

## Tim Freund

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**May 2009 to Present: Technical Team Leader, Payment Engine Team, NIC Inc** – Provide technical direction to a team of 7 people working on the NIC Payment Engine product, produce software, manage deployments, and provide on call support.

- Led the corporate IT side of an analysis and implementation of a payment processing solution migration for TexasOnline.
- Managed the operations, maintenance, and upgrades of 29 instances of the Payment Engine application and its integration with five payment processors, handling over 8,180,000 transactions and \$2,372,551,488.35 in payments for the 2009 calendar year.
- Wrote Java SFTP and FTP transport utilities with the JSCH library to facilitate timely transfer of bank deposit files.
- Wrote and delivered presentations covering the rewrite of the Payment Engine application at the NIC technical conference.

**May 2007 to May 2009: Software Developer, Payment Engine Team, NIC Inc** – Produce software to support the NIC Payment Engine product using Java, JDBC and Apache Axis 2, manage deployments to Solaris and Linux environments of the software for 20 portals, and provide on call support.

- Wrote Java middleware and core transaction logic to support payment processing for the Payment Engine rewrite.
- Implemented and deployed a custom SFTP server to streamline batch file processing with Python and Paramiko.
- Removed downtime requirements for Payment Engine upgrades from an average of 2 hours to nothing through the application of bash shell scripting on Solaris.
- Installed and configured the corporate Subversion server running on Solaris. Wrote an administrative interface for the server with TurboGears.

**April 2005 to May 2007: Senior Programmer Analyst, Honeywell FM&T** – Responsible for creating software systems and maintaining existing systems in a variety of application development languages. Interact with customers to ensure systems meet required specifications. Assist with application test plan creation. Mentor other software developers.

- Led a small team of programmers in an attempt to rewrite the network management system to be network driven rather than database driven. Tools included Java, Spring, Hibernate, and Python.
- Produced a CRUD application with Ruby on Rails and PostgreSQL to manage the software portfolio of the plant.
- Worked with a remote team to upgrade an application that facilitates secure material transportation scheduling. The work was done with Java, Spring, Hibernate and Tapestry, and data migration scripts were written in Python.
- Produced a Weblogic authentication provider to integrate a commercial plant operations application with the in house SSO.
- Provided a one week delivery on a firewall access application written with Java, Spring, Hibernate, Tapestry and PostgreSQL.
- Wrote a change management web application that integrated with the instant messaging system in the plant. Change actions could be monitored and approved through a web browser or an IM client. The application modeled practices in the ITIL change management process, and was written with Java, Spring, Hibernate, Tapestry, and PostgreSQL.
- Produced a database dashboard to manage development server resources with Python, TurboGears and Oracle.
- Participated on a penetration testing team that engaged internal and external networks. Wrote and modified tools to assist system surveillance and exploitation with a number of tools including Python, Ruby, C, Java, and Metasploit.

**April 2002 to April 2005: IT System Engineer, Honeywell FM&T** – Responsible for creating software systems and maintaining existing systems in a variety of application development languages. Interact with customers to ensure systems meet required specifications. Assist with application test plan creation.

- Built a network management application with Java, JSP, Oracle JDBC, and Servlets that provisioned IP addresses, host names and network switch security settings. Integration with the Lucent VitalQIP DNS and DHCP server was done with Python CGI scripts.
- Integrated a commercial electronic learning management system with in house SSO and an existing Peoplesoft HR system. The SSO integration was done with Java Servlet Filters, and the HR integration required EJB, Oracle JDBC, and LDAP.
- Wrote a telephone inventory and maintenance server with Python and Zope. Inventory collection devices were bar code reader equipped Palm Pilots that were programmed with C.
- Designed an Oracle Portal user provisioning tool with a “model driven development” approach. The application was built with Java, JSP, Struts, Hibernate and Oracle, and much of the code was designed with the AndroMDA product.

**February 2000 to April 2002: Student Programmer Analyst II, Honeywell FM&T** – Responsible for creating software systems and maintaining existing systems in a variety of application development languages.

- Assumed maintenance responsibilities for the Nuclear Grade Steel application, a Java Servlets application that utilized a JDBC data access layer, refactored the code base to ½ of its original size and removed numerous resource leaks that were causing the application to crash.
- Developed a Web Single Sign On system with Java, Apache Axis, LDAP, and JDBC. Also developed Web Single Sign On client libraries for Java, PHP, Python, and ASP and assisted application developers with integration.

Computer Science and Mathematics studies, Rockhurst University (No degree)

References and open source contribution details are available upon request.