

## Experience

- **Google**  
*Partner Technology Manager, YouTube* *04/2014 to Present*
  - Consulted and provided premium partners in variety of industries with technical solutions for the problems that they face. The types of problems range from copyright problems to asset management problems.
  - Worked closely with business development team on variety of projects and deals. I provided them with technical insights and data analysis as evidence to support their decisions.
- **Coiner, Inc**  
*VP of Engineering* *04/2013 to 03/2014*
  - Redesigned and implemented the payment API, which is the core value of the company. I also developed customer-facing transaction management web app and internal administrative web app. My primary focus was to design and implment them as simple as possible to make them easy to maintain. Those apps did not have tests before I joined the company. I started adding the tests as I wrote new code, and we had almost 700 unit tests after several months of development.
  - Led and managed the entire development team of several engineers. I defined the development cycle using scrum to assign and complete tasks quickly and iterately. I gathered requirements, defined specifications, and split them into tasks that can fit in a sprint to run.
  - Led and managed to implement the zero downtime deployment environment and development cycle. Before I joined, we had to shutdown our apps completely in order to deploy new codebase to production environment due to its technical problems. We developed the new deployment process so that we can deploy multiple times a day without shutting down our apps.
  - Led the company to pass the PCI security standard. It is critical to obtain and keep the PCI certification as a company deals with credit card transactions because we cannot operate without one. During the audit, I worked very closely with the auditors to make sure our software and infrastructure are indeed secure and complainant with the PCI.
- **OptimisCorp**  
*Senior Software Developer* *01/2012 to 03/2013*
  - Redesigned and implemented new administrator facing section of rails application with much maintainable architecture using Twitter Bootstrap. We've followed TDD to implemente the section and it is all covered by tests including acceptance tests.
  - Rewriting very old and not-so-easy-to-maintain part of rails application to make it more maintainable while adding new features. We are adding tests as we rewrite them so that the applcation allows us to find problems before deploying to production. We've introduced jasmine for testing client side JavaScript.
- **Mingle**  
*Lead Node Developer* *11/2011 to 10/2012*
  - Designed and implemented realtime messaging service using Node.js. This messaging service serves users on our iPhone, Android and web, and it allows them to communicate each other across the platforms. In order to support our old version of iPhone app, I hacked Socket.IO so that it can speak both protocols that are used in Socket.IO 0.6 and 0.8.

- **Revolution Prep**

- *Senior Software Developer*

*04/2011 to 01/2012*

- Designed and implemented new data server that all other internal applications retrieve data from. The objective of this project was to replace the existing legacy system, thus the tasks included analysis and migration of existing data and design and implementation of APIs to serve the data. This application was built using rails3, MySQL and redis.
- Designing and implementing new store application that customers and internal personnels use to purchase courses and items.

- **NASA Jet Propulsion Laboratory**

- *Software Engineer*

*12/2006 to 04/2011*

- Redesigned and implemented new web portal for NASA-JPL Physical Oceanography Distributed Active Archive Center (PO.DAAC) using Drupal and Apache Solr. This web portal will be publicly accessible and allows users to navigate through over a couple million granules we have archived for years using faceted search.
- Redesigned and implemented Grails web application for NASA-JPL Physical Oceanography Distributed Active Archive Center (PO.DAAC) that fetches data from internal and external data providers, archives and distributes them for scientists for their researches.
- Developed software that monitors status of data product generation for Phoenix Mars Lander mission. This software was used in operation.
- Developed workflow manager implementation that generates data products for Mars Science Laboratory mission. This software will be used in operation.

- **California State University Northridge ITR**

- *Software Engineer*

*03/2006 to 11/2006*

- Developed a servlet application that implements SAML 2.0 specification to allow interaction between Googles single sign-on service with CSUNs single sign-on service for Gmail beta service. This application provides a capability to sign in to Googles web-based application using CSUNs single sign-on service instead of theirs so that students and faculties at CSUN do not need to deal with another account information for Googles web-based applications.
- Redesigned and improved existing software download page for student and staff/faculty to make it possible to maintain the page without modifying the actual code by removing all hard-coded configurations and using configuration file instead. This resulted in reducing time needed for maintenance, from 4 hours to 30 minutes per change, since a change in code requires a lot of time whereas change in configuration file does not.
- Developed a module in Perl that authenticates student and staff/faculty using LDAP server, where the university manages all information about student and staff/faculty. The module resulted in a part of the software download page to provide a capability to authenticate users through web interface.
- Responsible for managing CVS (Concurrent Versions System) repository, a version control tool, for the software download page project.
- Developing J2EE application, using Servlet/Portlet and JSP technologies, which will replace the current web page for the university. The application is designed to provide a capability to add a new content to the web page dynamically, whereas the current one requires all contents to be added statically, and possibly a change in code. The new application will result in reducing maintenance time, from 6 hours to 1 hour per change, since all contents will become possible to be created dynamically from the web.

- **California State University, Northridge**  
*M.S. Computer Science*
- **California State University, Northridge**  
*B.S. Computer Science*

2009

2006

## Skills

- Programming languages including Ruby, JavaScript, Java, PHP, C, C++, C, Python and Perl.
- Web frameworks including Node.js (wrote a book on it!), Ruby on Rails, Grails, Sinatra and Tornado.
- Test Driven Development.
- Emerging web technologies including HTML5 and websocket.
- Databases including MySQL, redis, CouchDB and MongoDB.
- Contributed to several open source projects and also open sourced many projects including my master's thesis project.
- System level programming on Unix/Linux operating system.
- Extensive knowledge in Object-Oriented paradigm.
- Extensive knowledge in software design and architecture.
- Extensive knowledge in computer graphics technologies including OpenGL.
- Source code management tools including Git and Subversion.
- Excellent communication skills.
- Fully fluent in Japanese.
- Love FOSS culture!