

Eric Yin

+1 (714) 723-2647 (Fullerton, CA, 92831)

yintiancai@gmail.com

SUMMARY

12 years' experience in global software development company using OOP methodologies.

Have strong analytical and problem-solving techniques, excellent communication skills, and ability to work successfully both in groups and independently. Have a passion for software design and development. Have ability to learn new technologies quickly.

Experienced at developing software applications for commercial use by analyzing and incorporating research from scientific papers.

Experienced at taking several projects and going through entire SDLC and agile processes to improve my ability and establish self-confidence.

Experienced at doing some proof of concept works for new products.

Experienced at integrating new development with existing in-house code as well as 3rd party libraries.

Experienced at designing and implementing cloud SaaS applications.

TECHNICAL SKILLS

Languages

- C/C++
- Java
- C#
- JavaScript
- HTML5
- Window Batch Script
- Linux .sh script
- XML
- JSON
- Node.js
- AngularJS
- PHP
- React

Skill Emphasis

- Object Oriented Analysis/Design
- UML
- Design Pattern
- Automated Testing
- System Development Life Cycle
- Agile Scrum Development
- MVC
- HTML 2D Drawing
- Teamcenter and NX development and Integration
- REST Web Service
- Cloud Application Deployment
- Building Website and Web Application
- AWS Solution Architect

Tools & Others

- Visual Studio
- Eclipse
- FireFox + FireBug
- Visio/Enterprise Architect
- HTML5 Canvas/SVG/CSS
- GWT
- Silverlight/XAML
- gSOAP/Web Service
- Web Logic, Jetty, JBoss
- Source Control
- Android Studio
- AWS Console/CLI
- CMS Word Press/Joomla
- Godaddy

Platforms

- Windows
- Linux
- Android Mobile

- AWS cloud platform

RECENT ONLINE TRAININGS

- 2017 AWS Summit in San Francisco
- AWS Certified Solution Architect – Associate
- AWS Certified Developer – Associate
- AWS Certified SysOps Administrator – Associate
- AWS Certified Solutions Architect – Professional
- AWS Serverless Architecture

TECHNICAL CERTIFICATIONS

- AWS Certified Solutions Architect – Associate
 - Valid from Aug 2017 to Aug 2019
 - Validation Number 8T5WEZTC2EF11KC7

WORK EXPERIENCE

Senior Software Engineer, Siemens PLM Software, Cypress, CA, United States	4/2012 – present
Software Engineer, Siemens PLM Software, Shanghai, China	3/2008 – 3/2012
Software Engineer Intern, Siemens PLM Software, Shanghai, China	7/2006 – 2/2008

Project	New Product Buildup
Development	Aug.2013-Dec.2016
Description	I worked with two friends as co-founder of one new company, to build some solutions based on our interests
Responsibility	Takes as CTO position to design/implement <ul style="list-style-type: none"> • A cloud based data management system (streaming data) • A healthy monitor application based on the platform • Build website •
Environment	Node.js, AWS, WordPress, JavaScript, Android, REST Web Services, C++, AngularJS, CSS, HTML5, Smart Watch, ...

Project	Siemens PLM Software Cloud based Design Review App
Development	Feb.2016-Present
Description	This project is to design and implement cloud native app that used to review some 3D data.

Responsibility	<p>Act as architect for this app, make sure the application is designed and implemented in right direction, including server / gateway / client app.</p> <p>Designed and implemented the planned features, we already did two demo for two agile sprints. It was very good. I also had deployed the entire app in AWS cloud, and can be accessed from mobile.</p>
Environment	JavaScript, HTML5, CSS, React, materials UI, Backbone, Flux, Java, Spring, Node.js, Eclipse, Visual Studio, Swagger, AWS Services (ELB, Route53, API Gateway, EC2, S3, DynamoDB, Auto Scaling Group, Lambda, CloudFormation ...)

Project	Siemens PLM Software Cloud based Teamcenter
Development	Dec.2016-Present
Description	This task is to provide deploy one Teamcenter server in AWS cloud for team testing.
Responsibility	<p>Responsible for doing the Teamcenter administrator settings, and learn the AWS technologies to management the network and server.</p> <p>Designed and implemented one deployment solution for Teamcenter based some information from sales departments. The deployed server is faster enough for testing. Still maintain the server and make enhancements.</p>
Environment	Teamcenter Server/RAC/Thin Client/AWC, AWS EC2 / VPC / ELB / Router53 /Domain / SSL / Gateway / Security Group/...

Project	Siemens PLM Software Mechatronics Collaboration Structure
Development	Jan.2016-Sep.2016
Description	This project is to provide a collaboration ability to collaborate automation engineer data with mechanical data when user doing machine design.
Responsibility	<p>Act as architect for this application, make sure the application is designed and implemented in right direction.</p> <p>Designed and implemented one common shared collaboration framework, so all other applications that require collaboration behaviors can use it and benefits from it. Customize the framework to meet the project specific requirement.</p>
Environment	C++, Visual Studio

Project	Siemens PLM Software P&ID Application
Development	Feb.2015-Present
Description	This project is to provide an application to draw 2D piping and instrumentation diagram based on 2D diagramming framework.
Responsibility	Act as architect for this application, make sure the application is designed and implemented in right direction.
Environment	C++, Visual Studio

Project	Siemens PLM Software 2D Diagramming Framework
Development	Mar.2013-Jan.2015
Description	This project is to provide some 2D diagramming capabilities as a foundation. So that some coming 2D applications can be developed based on it.
Responsibility	<p>Do some researches about 2D HTML5 capabilities, work on proof of concept, and analyze some test data. Based on it, try to optimize our solution and algorithm in order to achieve the best performance. Communicate with these support people from third party packages, come out the integration approach.</p> <p>After PoC, train other new members about some knowledge studied during PoC. Work on the high level design of one high priority project, finish it quickly.</p> <p>And work with the team to implement the framework.</p>
Environment	JavaScript, JSON, GWT, yFiles, HTML5 Canvas, SVG, C++, Inter-process communication technology

Project	Siemens PLM Software Teamcenter Weld Management
Development	Nov.2012-Feb.2013
Description	<p>NX Weld data is some manufacturing data, generated in design stage as a part of product model.</p> <p>The data need to be published in to Teamcenter and managed in Teamcenter. This project is to design a data model in Teamcenter, so that the published weld data can be stored and used in some downstream manufacturing stages.</p>
Responsibility	Design the weld data model in Teamcenter, and arrange meeting to review it and go through all project processes. Update the existing Teamcenter SOA API to manipulate weld data in Teamcenter. Come out auto test logic to test all developed public APIs..
Environment	C++, XML, VS2010, Teamcenter, BMIDE

Project	Siemens PLM Software Mechatronics Concept Designer
Development	Apr.2012-Oct.2012
Description	Mechatronics concept designer is system engineering tool, is used to perform a functional machine design approach, design your machine starting with requirements, map them to a functional model and evaluate concept alternatives that are the foundation for your detailed design. It's based on PLM software Teamcenter.
Responsibility	<p>Did some researches about ECAD integration, analyze how to exchange sensor and actuator data between mechatronics designer and ECAD software. Responsibility for this project from requirement analysis, functionality design and architecture design.</p> <p>Also attend to research works about multiple discipline object data model design in Teamcenter, the data model will be the base for later integration. Design NX side system navigator, and try to design the behavior and relationship between requirement, function, logical and physics.</p>
Environment	C++, XML, C#.NET, VS2010

Project	Siemens PLM Software Issue Management Thin Client
Development	Nov.2011-Mar.2012

Description	Thin client is one web based application for PLM system Teamcenter.
Responsibility	Studied the Teamcenter thin client framework, designed the thin client sub-module for issue management in Teamcenter thin client, and implement it finally. In this project, use Firefox plug Firebug to do the web application development. Also do some testing on different web browsers.
Environment	AJAX, CSS, HTML, JavaScript, XML, C++, Web logic

Project	Siemens PLM Software HD-PLM
Development	Jan.2011-Oct.2011
Description	HD-PLM is the next generation PLM product. User can quickly query and focus on the target part. The production also can be deployed in different platform, especially mobile platform. Agile Scrum development pattern is used in this project.
Responsibility	Did some researches about HD-PLM, analyze how to implement the functionalities of Visual Reporting in the new MS Silverlight environment. Developed some prototype of visual reporting in HD-PLM framework. Joined the search indexing scrum team, take some tasks about data transformation. Finished the thumbnail of part story, including thumbnail generation from JT part, Secure URL generation and thumbnail fetcher functionality. All codes is wrapped as Java servlet and deploy in web server.
Environment	C#.NET, VS2010, MS Silverlight, MS WPF, Web Service, Java, Eclipse, Servlet, Jetty

Project	Siemens PLM Software HD3D Visual Reporting
Development	Oct.2010 – Feb.2011
Description	HD3D a technique in an opening and visual CAD environment, which collect, analyze product data in one intuitive way. HD3D Visual Reporting is a tool to collect useful data from assembly (part attributes) or Teamcenter (Item, ItemRevision, Dataset), and then report the results in one effective style.
Responsibility	Enhanced the integration with Teamcenter, and read Item Master Form' attributes and ItemRevision Master Form's attributes, so that NX Visual Reporting can do some reports based on these attributes. Taken the re-design task about the visual report authoring tool, so that more complex reports can be defined in NX.
Environment	VS2010, NX, Teamcenter, PLM XML

Project	Siemens PLM Software Penetration Management
Development	Mar.2010-Dec.2010
Description	This project implements the tools necessary to manage communications between Routed Systems Designers and Structural Designers for the creation of deck and hull penetrations required for routed systems. (Server is Teamcenter, Client is NX)
Responsibility	Responsible for the architecture design in NX side, finished some related functionality specification and design specification. Introduced Teamcenter workflow into NX by enhancing the integration layer, so that penetration request reviewers can sign off workflow task in NX

	directly. Taken over the UI prototypes codes, and re-factor the codes and submitted it into NX source. Instructed one new hire and handed over my task in this project to him.
Environment	C++, VS2008, NX, Teamcenter, SOA, Ship Building

Project	Siemens PLM Software Validation Rule Editor
Development	Dec.2009-Feb.2010
Description	This project delivers a tool, which is used to generate/configure Validation Rule file in one visual environment. The rule is one configuration file for NX Check-Mate tools. In this file, user can define which parts to check (conditions) and how to check (checkers).
Responsibility	Responsible for the tool design work and initialize requirement specification, functionality specification, design specification. Scheduled week project meeting to discuss the status and analyze the found issues. Coordinated with tester to finish the testing task.
Environment	Java, Eclipse, NX, PLM XML, SWT, Swing

Project	Siemens PLM Software Teamcenter Issue Management
Development	Feb.2009-Dec.2009
Description	Teamcenter issue management is comprised of methods, concepts, processes as well as tools to perform design review, identify problem, capture problem data, log problem and data into issue database as issue and manage issue and fix issue in standard business workflow. Design review process is executed by leveraging multiple applications such as NX, Visualization as well as Teamcenter RAC embedded viewer and so on.
Responsibility	Joined in the project as one major developer, discussed the framework design with the team. Studied the Change Management process and responsible for the development of rich client user interface. And defined the SOA interface for issue management module, so that the APIs can be used by its client, such as RAC, NX, Teamcenter Visualization.
Environment	C++, VS2008, Java, Eclipse, Eclipse Plug-In, Teamcenter, NX, Teamcenter Visualization, SOA

Project	Siemens PLM Software XML Comparator
Development	Nov.2008-Apr.2009
Description	This project provides a generic XML comparison tool, which can take a filter to control the process of comparison further. The immediate need is to satisfy the comparison of two Check-Mate checking result files with XML format.
Responsibility	Assigned for managing the project process. Collected requirements and wrote the requirement specification, functionality specification and design specification. Separated the project functionalities into different modules and assigned them to team members.
Environment	C++, VS2005, NX, XML

Project	Siemens PLM Software NX Issue Management
Development	Jul.2006-Oct.2008 (Intern from Jul.2006-Feb.2008)
Description	Part I Jul.2006 – Jul.2007 The goal of this project is to provide a software package including rich API. It supports the information transfer between Teamcenter Community Visual Issue List module and NX. The

	<p>other programmers could get enough information from TeC Visual Issue List or write them into TeC Visual Issue List with the API supplied by this project.</p> <p>Part II Aug.2007 – Oct.2008</p> <p>This project is defined to provide Issue Management capabilities in NX to manage issues and integrate with Teamcenter products.</p>
Responsibility	<p>Part I</p> <p>Studied the third software package gSOAP and transfer the web services, provided by Teamcenter Community Visual Issue List module, into C/C++ interfaces vis gSOAP. Defined the package layers, so that it's easy to be called by C functions or C++ class.</p> <p>Part II</p> <p>Defined some internal data structures and algorithms to organize and operate memory data. Implemented one adapter for hiding the differences between the different source database and defining one common data output interface. Joined in some tasks about UI.</p>
Environment	C++, VS2005, NX, Teamcenter Community, SOAP, XML, Web Service, gSOAP, SQL Service

	Some Projects I undertaken in university
Development	2005.3-2006.06
Product Description	<p>C++ Programmer, (C/C++, VC6.0)</p> <p>Participated in designing and implementing a dynamic form tool. Implemented creating, querying and managing data forms. Wrote functional specification of project and some user documents.</p> <p>Java Programmer, (Java, JBuilder)</p> <p>Identified problems of tool requirement planning model for flexible manufacturing system. Designed and Implemented cutting tool entering warehouse, borrowing, returning and outputting warehouse functionalities.</p>

EDUCATION

Northwestern Polytechnical University, China

- MS in Information Integration Technology, Sep.2005 - Mar.2008

Northwestern Polytechnical University, China

- BS in Aircraft Manufacturing Technology, Sep.2001 – Jul.2005