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Bo.Wan

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Employment

IT Associate	Morgan Stanley	Jun.2012 – Present

ECSTRA Compensation Management System – Ver. 3.0, Ver. 4.0

Designed, developed and maintained a C# and .Net based system, ECSTRA, which is used to manage Morgan Stanley global employees' compensation. The front-end is built on WPF, PRISM, Infragistics, Unity 2.1 and MVVM. The back-end is developed on WCF, Enterprise Library 5.0, Workflow Foundation 4.0, Unity 2.1, Message Queue, Crystal, etc.

Key Achievements:

- Designed and developed the cash award termination enhancement. Integrated off-line and on-line termination treatment and simplified the process.
- Refactored the server tier by making use of Unity in WCF services which introduced dependency injection pattern and loosely coupled component design into the server tier.
- Made use of Workflow Foundation, LINQ and Rule engine to redesign and develop equity award termination policies which result in an extendable, flexible and policy dynamic loaded module.
- Developed MS Test Infrastructure.
- Supported (Level 3) HR Compensation Prod environment and UAT environment.

Research Assistant	University of Ottawa	Sep.2010 –May.2012

- Developed a new automation test case generator which can generate test cases following software operational environment.
- Developed a software reliability/availability estimator for web application reliability testing.

Software Engineer II	Applied Materials	Jul.2007 – Jul.2010

Common Framework – Ver. 1.0

Designed, developed and trained a C# based UI and Server development framework for AMAT's all automation manufactory solutions. By plugging in business logics, other teams can build up a solution for semiconductor and solar energy panel manufactory in a very short time. The main techniques used in project include .Net 3.5, WPF, SCSF, PRISM, Enterprise Library, Silverlight, WCF, guidance package and code generation.

Key Achievements:

- Designed and proposed a rich client light server prototype to architect. Improved the real-time manufacturing automation system performance and reduced maintenance costs.
- Made use of composite pattern and reflection to design and develop Query-Service module which result in a very flexible, extendable, SQL dynamic loaded server.
- Led a team to develop a UI-Framework ver. 2.0 prototype based on WPF, PRISM and Silverlight.
- Developed Test harness and NUnit Infrastructure.
- Trained and supported other teams to develop SmartFactory based on Common Framework.

Utilities – Ver. 1.0

As one of the three main developers, I designed and developed logging and exception handling libraries based on Enterprise Library 5.0 to fit AMAT enterprise infrastructure needs. I also developed some other utilities such as Common Event Service.

Key Achievements:

- Designed and Developed Common Event Service, Logging and Exception Handling Application Blocks.
- Developed the NUnit Infrastructure and led the white box testing.
- Trained and supported other teams to use utilities.

Publications:

- *"Evaluating Reliability-Testing Usage Models"*,
  Bo Wan, Gregor Bochmann, Guy Vincent Jourdan, IEEE COMPSAC 2012.
  Acceptance Rate 17%
- *"Improved Usage Model for Web Application Reliability Testing"*,
  Gregor Bochmann, Guy Vincent Jourdan, Bo Wan, 23rd IFIP Int. ICTSS'11.
  Acceptance Rate 33%

Technical Expertise

- Programming Language:	C#.NET , C++, ASP.Net, Java, VB.net, VBA, VBScript, LINQ, Lambda.
- Framework:	.Net 3.5 & 4.0, Enterprise Library, WCF, WPF,PRISM, SCSF, CAB, WF
- Automation Testing:	3.5&4.0
- Database & Web:	MSTest, NUnit, JUnit, EasyMock, DbUnit, UI Automation Verity.
- Development Environment:	Sybase, Oracle, IBM DB2, SQL Server, XML, IIS, MSMQ, Window Service Visual Studio, Eclipse, Perforce, Rational Rose.

Education

Master of Science	**University of Ottawa, Canada**	**Sep.2010 – May.2012**

Major: Computer Science.
- GPA: 4.13
- Thesis: Improved Usage Model for Web Application Reliability Testing.

Bachelor of Technology	**Xi'an Jiaotong University, China**	**Sep.2003 – Jul.2007**

Major: Software Engineering,   Minor :   Accounting
- GPA: 84.2% / 87 %

Certifications

- IBM Certified DB2 Application Developer
- IBM Certified DB2 Database Associate

Honors and Achievements

- Research Assistantship (University of Ottawa)	2010 – 2012
- Excellent Graduate Scholarship (Xi'an JiaoTong University)	2007
- Dean Scholarship of Software Engineering School(Spring)	2007
- Siyuan Scholarship	2006
- Dean Scholarship of Software Engineering School(Spring)	2006
- Dean Scholarship of Software Engineering School(Fall)	2006
- Yu-bingchang Scholarship	2005
- Siyuan Scholarship	2005
- New Enrollment Scholarship	2004