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Summary

- More than 6 years of software development experience.
- Awarded "Most Valuable Professional" (MVP) in C# by Microsoft for three consecutive years (2006 - 2008).
- Passionate about programming - have written plenty of open source software in my spare time.
- Love learning new technologies and programming languages. Always looking for ways to improve as a software developer.
- Some comments from users/readers of my software and articles:
 - "Got my 5 for this incredibly useful utility (Undisposed), and I love your writing style--very friendly and easy to read!"*
 - "This is a great article - I've been aware of the need for BeginInvoke, but I haven't found such a concise and thorough explanation as to just why you need to use it"*
 - "Your WinMacro application is perfect for automating some testing which I need to do. Thank you for spending the time to come up with it and also for distributing the source code."*
 - "IRCTC should learn something from you, to implement these kinds of great ideas. Keep it Up"*

Technical Competencies

Languages : C# 3.0, F#, C++, Python, JavaScript, C++/CLI and Java. Can read MSIL and x86 assembly.

Tools : Visual Studio .NET 2008, Rational Clearcase, TFS, Reflector, Windbg, SOS

Databases : SQL Server

Work Experience

Technical Lead at HCL Technologies Ltd.

Oct 2003 - Present

[C#, .NET 2.0/3.5, Winforms, Python, COM, C++, Windbg, SOS, Rational Clearcase]

Worked on multiple versions of Viper, a wafer inspection tool sold by KLA-Tencor, one

of the world's premier semiconductor equipment manufacturing companies.

- Rated "Outstanding" in almost all performance reviews held so far.
- Wrote SECSimLink (<http://hcltech.com/semisignals>) outside office hours, to replace Secsim Pro, a host simulator. SECSimLink is now being sold as a product by HCL.
- Considered an expert in the Factory Automation aspect of the semiconductor domain.
- Debugged and resolved lots of problems, including memory leaks, deadlocks, crashes and resource starvations etc. using tools like Windbg, SOS and Process Explorer [[Sample](#)]
- Wrote several project specific tools to automate boring, repetitive and tedious tasks. IronMon, for example, is a tool that acts as a health monitor for reliability runs and periodically emails project members about the status of the run. This previously required a person to keep watch at the tool.

Viper 7.0 / 7.1

Dec 2006 - Present

Viper 7.1 is the latest version of Viper, written from scratch in .NET 3.5 (C#, C++/CLI and IronPython). A Winforms app, it uses SQL Server 2005 as the backend and talks to a lower level Java library through CORBA.

- Suggested and implemented IronPython scripting support. Helps developers look at and change state of running application and write automated integration tests.
- Designed and implemented critical pieces of the software, like job management, sequencing of wafer inspection and post processing, and pausing/resuming/aborting of operations, all of which are heavily multithreaded.
- Wrote several generic reusable lower level classes, like LazyWeakProxy and Workflow.
- Helped design and implementation of lazy loading of properties from DB, using Castle DynamicProxy.
- Designed and implemented error handling framework, diagnostic framework and several UI controls that required custom drawing and real time updates.
- Ported Factory Automation code (20K lines) to work with the new version.

Viper 6.1

Oct 2004 - Dec 2006

Viper 6.1 is a Winforms application, written in .NET 1.1, with SQL Server 2000 as the backend.

- Implemented several Factory Automation and material handling related features, including inter-lot pipelining, which dramatically increases application throughput..
- Resolved hundreds of customer issues, including memory leaks, race conditions and data corruptions. Was sent as the first choice to Japan to resolve a critical customer issue. Was instrumental in increasing the MTBA (Mean Time Between Assists) from less than 20 hours to more than 80 hours.

KT FA

Dec 2003 - Oct 2004

KT FA is a COM library written in C++, with a MFC GUI for viewing state and exercising the library. It implements several Factory Automation standards and is intended to be used by all KLA-Tencor equipment software, saving money and standardizing the implementation in the process.

- Quickly got up to speed with the code, COM and STL, and was granted check-in rights in record time.
- Added several APIs and implemented them using C++, using advanced language features like template template classes.
- Became an expert in SSL (Secsim Pro Scripting Language), a dynamically typed interpreted language that runs on Secsim Pro, a host simulator.
- Made small additions and changes to the GUI.

Software and Articles

- 15 articles in [CodeProject](#) with an average rating of 4.24/5 and two "article of the month" awards.
- [Cicero](#) - a managed library that uses DbgEng and SOS under the covers to provide programmatic access to managed crash dumps.
- [Undisposed -](#) a tool written in C#/C++/CLI that uses the CLR Profiling COM API to monitor finalizations and object creations and report all undisposed objects.
- [AJAXAvailability](#) - a Greasemonkey script, written in JavaScript, that modifies IRCTC's web page rendering to display berth availability inline, AJAX style.
- [Winmacro](#) - a macro recorder/player for Windows written in C++. Has logged more than 6000 downloads.
- [Wami](#) - an Windows mobile application that uses cell broadcast information freely broadcast by service providers to provide location tracking.
- [findrefs](#) - a console app written in C#, that analyses .NET assemblies and lists references to types outside the current assembly. Useful for finding dependencies.
- [MethodLogger](#) - a Visual Studio macro written in VB .NET, that inserts custom code at the start and end of methods in a file.
- [The Genius](#) - a chess program written in C++.

- [Winbots](#) - a combat simulator written in Java, where players write programs that compete with each other.

Awards

- Microsoft MVP in Visual C# (2006 - 2008)
- Received "Certificate of Excellence" from KLA-Tencor (HCL Tech's client)
- Was ranked 47 among tens of thousands of participants in Google India CodeJam 2005

Education

Bachelor of Engineering in Computer Science and Engineering, Thiagarajar College of Engineering, 2003. 83% (Average)