

Objective To seek a **summer intern** in your company where I can fully utilize and expand my software development skills.

Education

PhD, Computer Science , Iowa State University
(Graduating in Fall 2006)

BE, Computer Science & Engineering
National Institute of Technology(NIT), Trichy, India.

Professional Experience

Software Engineer, IBM Software Labs, India	July 2000 – July 2001
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- Developed a plug-in for OS/2 as a part of the development team for InstallShield Multiplatform (Version 4) team for OS/2. It adds platform-specific functionality to the IDE and product installations.
- Identified and solved a profile restoration issue in IBMGINA, which is a part of the Microsoft Network Client Logon Model (Windows 2000) connecting to IBM Servers.
- Worked as a member of the maintenance team for IBM HTTP server (based on Apache) for OS/2.

Web Developer, Center for Plant Genomics, ISU	May 2005 - Current
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- Automated the process of extraction of Gene-specific information from genomic data and the storage of the extracted information to a database to be used by a gene-mapping Software (viz) CMAP using Perl, Awk and MySQL.
- Develop CGI scripts in Perl that use sequence alignment programs like BLAST and invoke genomic browser applications like GBrowse to display the alignments.
- Develop and maintain the web-site for Center of Plantgenomics Research in MAGI.

Research Projects

- Developed a Client-Centric Approach for Media Streaming in Centralized Server Environments which guarantees 50% lesser Service Latency than the existing schemes. (CCA+, IEEE IPCCC 2004)
- Developed the *first* Service scheduling (dynamic load balancing) approach for video streaming in P2P Systems which reduces the service latency by almost 75%. (Shaking, IEEE Globecomm 2005)
- Developed a Multi-Source service scheduling approach for video streaming in P2P systems which reduces the service latency by more than 50% (Submitted to IEEE ICDCS 2005).

Software Projects

- Developed a simulator for Peer to Peer Media streaming protocol in C++
- Developed a Service Scheduler for Peer to Peer Media Streaming in Java.
- Developed an Ethernet device driver Ethernet for Xinu in C.
- Developed a hierarchical file system in C.

Software Skills

Languages	C#, Visual C#,VB.NET,C++, C, Visual C++, Visual Basic, Java, Java ORB programming, Pascal, Lisp and Prolog.
Operating Systems	Windows, Linux, UNIX,Solaris, HP-UX and Mac
Scripting Technologies	Perl, Awk, Korn/Bash/C shell scripts.
Internet Technologies	HTML, Java Script, VBScript, XML,IIS,Apache.
Database Technologies	Oracle, MySql, MS Access, MS SQL Server.
Development Tools	JBuilder, Rational Rose, ClearCase, MS Visual Studio

Publications

Ashwin Natarajan, Ying Cai, Johnny Wong . "[Improving Server Broadcast Efficiency through efficient utilization of client bandwidth](#)" **23rd IEEE Int'l Performance, Computing, and Communication Conference (IPCCC'04)**, Phoenix, AZ. pp. 1-8, 2004.

Ying Cai, **Ashwin Natarajan**, Johnny Wong. "Shaking Service Requests in P2P Video Systems", **IEEE Globecom 2005, St.Louis, MO.**

Ashwin Natarajan, Ying Cai, Johnny Wong. "Multi-Shake: A Multi-Source Approach to Service Scheduling in Peer to Peer video Systems" *submitted to* **IEEE ICDCS 2006.**

Awards, Honors and Activities

- Awarded Graduate Teaching Assistantship by Iowa State University.
- Awarded Graduate Scholarship by Iowa State University
- Recipient of the Deans Merit Scholarship at National Institute of Technology, Trichy.
- Was a rank holder in a Math contest conducted by **AMTI** (Association of Math Teachers of India.)
- Student Member of the **IEEE**

References

Available upon request.