

Manisha Bose

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manishabose.github.io/portfolio | linkedin.com/in/manishabose | github.com/ManishaBose

Education

Heritage Institute of Technology, Bachelor of Technology (B.Tech) Sept 2021 – June 2025

- GPA: 9.1/10
- **Coursework:** Data Structures and Algorithms, Object-oriented programming, Computer Networks, Operating System, Database Management

Experience

Software Engineer, Apple – Cupertino, CA June 2005 – Aug 2007

- Reduced time to render user buddy lists by 75% by implementing a prediction algorithm
- Integrated iChat with Spotlight Search by creating a tool to extract metadata from saved chat transcripts and provide metadata to a system-wide search database
- Redesigned chat file format and implemented backward compatibility for search

Software Engineer Intern, Microsoft – Redmond, WA June 2003 – Aug 2003

- Designed a UI for the VS open file switcher (Ctrl-Tab) and extended it to tool windows
- Created a service to provide gradient across VS and VS add-ins, optimizing its performance via caching
- Built an app to compute the similarity of all methods in a codebase, reducing the time from $\mathcal{O}(n^2)$ to $\mathcal{O}(n \log n)$
- Created a test case generation tool that creates random XML docs from XML Schema
- Automated the extraction and processing of large datasets from legacy systems using SQL and Perl scripts

Publications

3D Finite Element Analysis of No-Insulation Coils Jan 2004
Frodo Baggins, *John Doe*, Samwise Gamgee
10.1109/TASC.2023.3340648

Projects

Multi-User Drawing Tool github.com/name/repo

- Developed an electronic classroom where multiple users can simultaneously view and draw on a "chalkboard" with each person's edits synchronized
- Tools Used: C++, MFC

Synchronized Desktop Calendar github.com/name/repo

- Developed a desktop calendar with globally shared and synchronized calendars, allowing users to schedule meetings with other users
- Tools Used: C#, .NET, SQL, XML

Custom Operating System 2002

- Built a UNIX-style OS with a scheduler, file system, text editor, and calculator
- Tools Used: C

Technologies

Languages: C++, C, Java, Objective-C, C#, SQL, JavaScript
Technologies: .NET, Microsoft SQL Server, XCode, Interface Builder