

Employment

Software Engineer, Intern	Apple Computer	Summer 2004
----------------------------------	-----------------------	--------------------

iChat AV

- Reduced time to render the user's buddy list by 75% by implementing prediction algorithm.
- Implemented iChat integration with OS X Spotlight Search by creating tool which extracts metadata from saved chat transcripts and provides metadata to a system-wide search database.
- Redesigned chat file format and implemented backwards compatibility for search.

Lead Student Ambassador	Microsoft Corporation	Fall 2003 – Spring 2005
--------------------------------	------------------------------	--------------------------------

- Promoted to Lead Student Ambassador in Fall 2004; supervised 10 – 15 Student Ambassadors.
- Created and taught Computer Science course, CSE 099: Software Design and Development.

Head Teaching Assistant	University of Pennsylvania	Fall 2001 – Spring 2005
--------------------------------	-----------------------------------	--------------------------------

- Courses: Advanced Java III, Software Engineering, Mathematical Foundations of Computer Science I & II.
- Promoted to Head TA in Fall 2004; led weekly meetings and supervised four other TAs.

Software Design Engineer, Intern	Microsoft Corporation	Summers 2001 – 2003
---	------------------------------	----------------------------

Visual Studio Core (Summer 2003)

- Implemented a user interface for the VS open file switcher (ctrl-tab) and extended it to tool windows.
- Created service to provide gradient across VS and VS add-ins. Optimized service via caching.

Programmer Productivity Research Center (Summers 2001, 2002)

- Built app to compute similarity of all methods in a code base; reduced time from $O(n^2)$ to $O(n \log n)$.
- Created test case generation tool which creates random XML docs from XML Schema.

Education

Aachen, Germany	RWTH Aachen	Oct 2023
------------------------	--------------------	-----------------

- MSc in Simulation Sciences, Oct 2023. **GPA: 1.9**

Tehran, Iran	Sharif Tech	Oct 2016
---------------------	--------------------	-----------------

- BSc in Mechanical Engineering, Oct 2016. **GPA: 2.2**

Technical Experience

Projects

- **Multi-User Drawing Tool** (2004). Electronic classroom where multiple users can view and simultaneously draw on a “chalkboard” with each person's edits synchronized. C++, MFC
- **Synchronized Calendar** (2003 - 2004). Desktop calendar with globally shared and synchronized calendars, allowing users to schedule meetings with other users. C#.NET, SQL, XML
- **Operating System** (2002). UNIX-style OS with scheduler, file system, text editor and calculator. C

Additional Experience and Awards

-
- **Instructor (2003 - 2005):** Taught two full-credit Computer Science courses; average ratings of 4.8 out of 5.0.
 - **Third Prize, Senior Design Projects:** Awarded 3rd prize for Synchronized Calendar project, out of 100 projects.

Languages and Technologies

-
- C++; C; Java; Objective-C; C#.NET; SQL; JavaScript; XSLT; XML (XSD) Schema
 - Visual Studio; Microsoft SQL Server; Eclipse; XCode; Interface Builder