

Ayal Spitz

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Education

MS Engineering Management
The Gordon Institute, Tufts University
Medford MA, 8/08

Marketing and Advertising Strategies
Academy of Art University
San Francisco CA, 12/05

Introduction to Advertising
Academy of Art University
San Francisco CA, 8/05

Executive Education Program in Innovation
MIT, Cambridge MA, 7/04

Certificate Program in Cryptography
MIT, Cambridge MA, 7/99

MA Computer Science
Brandeis University, Waltham MA, 5/97
Masters Research Project: Digital Rights Management

BA Computer Science
Brandeis University, Waltham MA, 5/96
Honors Research Project: Fractal Memory Model

Languages

Java, Objective-C/C#/C++/C, Ruby & Ruby on Rails, Perl, Active Server Pages, HTML, JavaScript, ActiveScript, Visual Basic

Technologies

Mobile Computing, Virtualization, SOA, SOAP, XML, Jini, JavaSpaces, Cryptography

Systems

Windows, Mac OS 9/X, Linux, iPhone, BlackBerry, Palm, Android

Awards

12 Recognition awards from MITRE, the US Air Force, and the US Census Bureau

Affiliations and Interests

Regular participant of the MIT Entrepreneur's Forum

Interested in Furniture Design and Construction, Computer Graphics: 3D, Fractal Compression, and Graphics User Interface, Fine Food and World Travel

Qualifications Summary

15+ years experience in mobile computing, distributed software, emerging technologies, and technology fusion; interested in leading a team bringing cutting edge technologies to market.

Professional Experience

Senior Software Engineer, PatientKeeper, Waltham MA, 4/12 - Present

- Leading the development of the Computerized Physician Order Entry (CPOE) Order Sets component of the PatientKeeper iOS Application, including supporting backend services. Responsibilities include:
 - Work with stakeholders to define functionality, a development schedule, and resource allocation.
 - Define and implement the underlying architecture.
 - Design the user interface and user experience.
 - Manage development resources.
- **Technologies:** Objective-C, iOS, Java, SQLite/SQLCipher, Git, JIRA, Confluence, Jenkins.

Lead Software Engineer, MITRE Corporation, Bedford MA, 1/01–4/12

+ SELECT PROJECTS

- Mobile computing champion.
 - Technical Lead & Developer, responsible for managing a distributed team, transforming a prototype USA Army unmanned vehicle control iPhone application into a production product.
 - Project Lead, Ubiquitous Mobile Computing research. Responsibilities included: proposal & funding development, five-developer team management, and customer management.
 - Mobile computing advocate to the Department of Defense. Responsibilities included: developing and demonstrating example iPhone, Android, and BlackBerry applications as well as giving regular presentations to executive staff.
 - Contributed iPhone source code to the public domain via open source.
- Ubiquitous mobile computing research lead. Responsibilities included: project definition, funding, project planning/milestone definition, team management, and customer relations.
- Co-Principal investigator researching virtual machine shared memory. Responsibilities included: managing relationships with other portfolio research projects, Linux kernel code development, and prototype testing.
- Led a five-developer team exploring the application of virtualization to the Air Force. Responsibilities included: project definition, scheduling, presentations, and demonstrations to executive staff.
- Advocated for the use of Service Oriented Architecture in the Air Force.
 - Led a multi-year \$15 million congressional plus up program focused on introducing Service Oriented Architecture into both the Joint STARS and AWACS fleet of aircraft.
 - Led a \$300k risk reduction effort to integrate web services into Joint STARS. Responsibilities included: defining project goals, setting the project schedule, communicating regularly with stakeholders, and managing multiple contractors. Effort resulted in a further investment of \$2M by the contractor in the technology.
 - Regularly pursued funding of web service integration into Joint STARS. Responsibilities included: presentations to executive staff, development of cost estimates, and writing funding proposals.
 - Competed for and won a MITRE prototyping grant to investigate the mashing up of Instant Messaging and RSS (InstantRSS) in the context of Service Oriented Architecture.
 - Led the effort to add web services to the Air Force's Theater Battle Management Core Systems including the deployment of a developer support website.
- Key contributor to next-generation computing architecture for the Joint STARS fleet. Responsibilities included: technical oversight of contractor studies of architectures, networking, communications, risk reduction efforts, and prototyping tasks.

- Investigated the use of Linux as an abstraction layer for hardware, leading to the expanded use of Linux in military applications.
- Led a small focused team of developers in the modification and deployment of SourceForge to support collaborative development between MITRE, the Air Force, and Air Force contractors.
- Architected and developed a community portal site for the Air Force, resulting in the sale of the portal application to a military contractor and a MITRE Presidential award.
- **Technologies:** Objective-C, Mobile Computing, Virtualization, SOA, Java, XML/XSLT/XPath/SOAP, Perl, Ruby, C#, ESB.

Senior Software Engineer & Manager, PersonalGenie Corporation, Carmel CA, 1/00–1/01

- Resource manager for three developers working on the PersonalGenie recommendation service engine. Responsibilities included: conducting regular status meetings, and advocating on behalf of the developers.
- Developed and deployed the first commercially viable implementation Jini Lookup Service.
- Developed a distributed time/task management system which was used by the physically distributed staff of PersonalGenie, resulting in improved task management and task priority traceability.
- **Technologies:** Jini, JavaSpaces, Java, Cryptography, LDAP directory services, XML, and XQL.

Software Engineer, MITRE Corporation, Bedford MA, 5/97–1/00

- Jini technology Advocate.
 - Led the exploration and application of Sun Microsystems Jini technology to military problems, resulting in higher visibility of Jini technologies within MITRE and the military community.
 - Liaison to Sun Microsystems, responsible for expressing military needs and concerns regarding Jini and influencing alterations to the Jini technologies.
- Promoted the use of commercial off the shelf technology.
 - Researched, prototyped, and transitioned specialized Air Force Weather Systems to commercial, off the shelf, laptops and net centric software such as Microsoft NetMeeting.
 - Demonstrated net centric capabilities to MITRE board of directors from Saudi Arabia.
 - Won two MITRE awards for a highly successful project.
- **Technologies:** Java, Jini, Perl, XML, Active Server Pages, JavaScript, HTML.

Programmer & Web Weaver, Linguistics Dept., Brandeis University, Waltham MA, 8/96–5/97

- Developed a C++ based educational application to graph grammar trees.

Programmer, Snap Software, Hollis NH, 5/96–8/96

- Re-architected and implemented a DOS/Text based medical application to a Windows/GUI based application.

Technical Support Specialist, MarketPlace Information Corporation, Waltham MA, and GCC Technologies, Bedford MA, 1/93–8/94

- Provided customer technical support.