

# Chris Miyachi

SOFTWARE ENGINEER · SOFTWARE ARCHITECT

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“Software is a great combination between artistry and engineering.”

## Summary

**Software Architect** and Systems Engineer with experience leading projects from conception to launch and maintaining until stable and mature, and weighing design trade-offs against business requirements. Electrical engineering education and background, knowledge of embedded systems to full stack development including web services, cloud computing, and software development methodologies. Leadership, management, mentoring, and organizational experience in the workplace and with professional activities that include writing, running conferences, and assembling local affiliate groups.

## Experience



### Xerox Corp.

SYSTEMS SOFTWARE ENGINEER

Virtual

1998-present

- Delivered design and implementation of Web Services for the **Extensible Interface Platform**.
- Managed SCRUM team of 5-7 people for API systems engineering.
- Led offshore team (5-6 people) to develop test driven development to link business requirements to software development.
- Created Software Development Kits for developers to all web service APIs available on a Xerox Multi-function Device.
- Managed a group of 26 developers to deliver a print solution based on Microsoft Embedded Operating System.
- *Recent Hands On Projects*: Address Book API to deliver JSON data of address data from device; Cross Origin Resource Sharing (CORS) implementation for our web services and device browser.



### IRIS Graphics, Inc.

TECHNICAL MANAGER, EMBEDDED SOFTWARE

Bedford MA

1995-1998

- Product development of continuous ink jet color printers
- Managed budget and reviews for group as well as day-to-day challenges of releasing embedded software for the printer.
- Spearheaded the development of software for the DSP chip embedded in the print head (TMS320C302xx); written in C and assembly code.
- Designed and implemented a Windows application (using MSVC++ 5.0 under Windows NT using MFC) to test our SCSI interface.



### MRS Technology, Inc.

SOFTWARE ENGINEER

Chelmsford  
MA

1989-1995

- Product development of photolithographic stepper
- Designed, implemented, and delivered to customers a robotic transfer system: included device drivers, database design, motion control and user interface.
- Designed and implemented inter-process communications software using sockets over the TCP/IP protocol; software worked across multiple platforms.
- Created analysis and graphical display system based on MATLAB which allowed manufacturing and customers to analyze semiconductor equipment.

## Education



### MIT Sloan School

Cambridge

MANAGEMENT SLOAN SCHOOL S.M. IN SYSTEM DESIGN AND MANAGEMENT

MA

- Combined Engineering and Management Degree; **GPA: 5.0/5.0**



### UMass Lowell

Lowell

M.S. IN ELECTRICAL ENGINEERING

MA

- **GPA: 3.8/4.0**



### MIT

Cambridge

S.M. IN TECHNOLOGY AND POLICY / ELECTRICAL  
ENGINEERING

MA

- Thesis: **Enhancing the Software Improvement Processes through Object-Process Methodology**



### University of Rochester

Rochester

B.S. IN ELECTRICAL ENGINEERING

NY

## Publications

- 2018 **IEEE Cloud Computing Magazine, Community of Practice**, Bi-monthly column on the various communities within cloud computing including research, standards, activists, and policy makers.
- 2012 **MIT Pulse Newsletter**, Articles published on Polymorphism, Agile Architecture.
- 2009- **The Abstract Architect**, My software architecture blog.
- 2011 **ACM Software Engineering Notes**, Article on Software and Agile Architecture.

## Professional Activities

**Chair, IEEE Cloud Computing:** 2013-2018 Managed a worldwide group of volunteers that produced conferences, educational materials, blogs and podcasts on **Cloud Computing**.

**Board, IEEE Cloud Computing Magazine:** 2016-2018 Review articles for submission and wrote column **Community of Practice**.

**Chair, IEEE Blockchain Initiative, Boston Chapter:** 2018-present Creating a local branch of the **IEEE Blockchain Initiative** in the Boston area.

**Board, IEEE Future Directions:** 2017-present Create new initiatives within the IEEE that focus on the latest technologies.

## Skills

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<b>Programming</b>	SCRUM, XML, SOAP, JSON, C/C++, Javascript, Java, Linux, Python, Embedded Systems, Full Stack Development, Robotics
<b>Leadership</b>	SCRUM Master, Lean Six Sigma GreenBelt, Requirements Management, Test Driven Development, Project Management, Architectural Tradeoffs, Security Risk Assessment
<b>Cloud Platforms</b>	Microservices, IBMCloud, AWS, Azure, Nutanix
<b>Languages</b>	English, Japanese
<b>Full Stack</b>	Node.js, Bootstrap, AngularJS, Express, MySQL, MongoDB, Python, Flask, SQLAlchemy, PostgreSQL, Click to see <b>VirtualStudio</b>
<b>AI and Machine Learning</b>	Edge App developed with AI, OpenCV, and Machine Learning on Azure : Click here to see <b>OpenVino AI Project</b> .
<b>Patents</b>	<ul style="list-style-type: none"><li>• Partial Print Provider, <i>US 7,511,836 B1</i></li><li>• A protocol allowing a document management system to communicate inter-attribute constraints to its clients, <i>patent pending</i>.</li><li>• Web Service for Enabling Network Access to Hardware Peripherals, <i>US 8832340</i></li><li>• Tools and methods for customizing a multi-function device, <i>US 9176751</i></li></ul>

## Personal

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- Marathon Runner (have run 20+ Marathons)
- Skier, Snowboarder, Fitness Trainer (Les Mills)
- Certified Iyengar Yoga Teacher
- Vice President, Iyengar Yoga of New England Association Board, 2014-2020
- Treasurer, Iyengar Yoga Association of the United States, 2019-present
- Board Member, New Hampton School, 2017-2020