

what we do

Silicon Seva is a consulting firm that specializes in embedded technologies. We have extensive experience in e-paper displays, RF design, analog circuits, sensor networks, active RFID, embedded linux and web technologies. We have seasoned professionals in Boston, Chennai, and Kuala Lumpur who can architect, design and build efficient and reliable solutions.



what have we done

Mobile RFID Supply Chain Application

Implementation of a supply chain monitoring system consisting of 4 independent desktop and mobile applications using a combination of desktop and handheld RFID readers communicating over HTTP with a web service. Developed Windows Mobile applications for the Symbol (now Motorola) range of handheld RFID readers running PocketPC 2003 and Windows Mobile 5 using Windows mobile application development tools and libraries. Implemented the desktop software using Visual Basic 6 and web service using the Apache web server, the PHP programming language and the MySQL database server. Supported successful demonstration equipment from inception until funding was acquired.

Object-based Electronic Ink Display

An electronic ink-based user interaction device that enables the display of comprehensive product information where environmental constraints exist. It integrates an RFID reader, an electronic ink display with a touch screen and a single board computer. Evaluated and selected the RFID reader, performed the electrical integration with the single board computer and implemented the software on the single board computer to communicate with the RFID reader and select from a set of images.

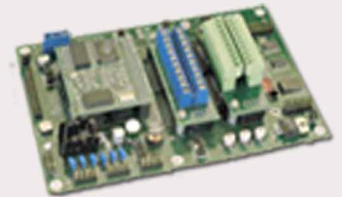


Distributed Equipment Monitoring

Implementation of a distributed equipment monitoring system for security and utilization purposes using a combination of desktop and handheld devices. Developed a Pocket PC 2003 application to interface with a custom communication peripheral that gathers data from sensor equipment on a number of mailboxes and transfers over Wifi to a central relay computer at a post office. Implemented aggregation software on the central relay computer that transferred data to central web site using the FTP protocol over a dialup connection. Implemented a Java web application to analyze and plot the aggregated data and present it to the clients using a password protected interface.

RFID Monitoring System

A solution that integrates active RFID tags equipped with environmental sensors with a near-realtime GPS tracking solution to provide chain-of-custody information about the shipping conditions. Assembled the hardware solution which included a RFID tag reader tied to a single board computer with GPRS and GPS capabilities. In addition, a proof-of-concept implementation that allows for changes in the single board computer's configuration via the web application interface was implemented.



who we are

Jaya Kumar - Jaya Kumar is an embedded systems architect with over 10 years of experience. He is an active contributor to the Linux kernel and Xorg. He is the author of various audio, video, input drivers and platform code in the Linux kernel including the cs5535audio driver for the OLPC XO and the defio framework used for e-paper and E-Ink displays.

Rajesh Kunnath - Rajesh has more than 15 years of experience in hardware electronics. His motto is to "DC-RF" and has been primarily involved in design of Wireless Systems/Components. Other areas include precision analog electronics, high-efficiency power conversion, power and signal integrity. He has an MS Degree from Indian Institute of Technology, Madras, India.

Sasha Javid - Sasha has 10+ years of sales and business development experience in high tech. Prior to Silicon Seva, Sasha worked for a mobile web solution provider, a wireless mesh networking company, as founder of an online radio web service and as a venture capitalist focusing on telecom investments. He has a degree from the Wharton School of Business.

Deva Seetharam (Advisor) - Deva Seetharam has over 15 years experience in distributed systems. He has worked on sensor networks, Zigbee, active RFID, electronic paper displays, embedded linux and web systems. He has a degree from the MIT Media Lab.

BOSTON, USA
483 Beacon Street, # 23
Boston MA 02115
USA
boston@siliconseva.com
+1 617 835 9001

KUALA LUMPUR, MALAYSIA
8C-1-8 Sri Murni Knodo,
Bukit Ledang,
Jalan Duta,
50480 Kuala Lumpur,
Malaysia
kualalumpur@siliconseva.com

CHENNAI, INDIA
36/32 Second Floor,
Sriram Nagar Main Road,
Pallipattu,
Chennai 600 113,
India
chennai@siliconseva.com
+91-98844 19445