

SHEEMA MIRCHANDANI

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AWARDS

- Sysoft® eRFP – Best innovation nomination in National Institute of Government Purchasing (NIGP) Annual Forum, Biloxi, Mississippi, 2004
- Sysoft® Web Application Framework (SWAF) - Best innovation award in Silicon Valley's Internet Commerce Expo, 2000
- Rutgers University MISA Best Teaching (Style) Award - 2013

MANAGEMENT EXPERTISE

- Member of the Board of Directors, Sysoft Corporation, 2010-2015 and 2019 to Present
- Consulting member of the Executive Board of Directors, Integratise Inc., 2001-2016
- Developed consulting practices for programming, systems and application development worth \$2 million plus during 1997-2001.
- Developed clientele for Sysoft Web Application Framework
- Developed clientele for Sysoft eRFP (eProcurement Tool)
- Developed consulting practice for Pharmaceutical Companies including Johnson and Johnson

PROFESSIONAL EXPERIENCE

1997–Present Integratise Inc., NJ Whitehouse Station, NJ
Director, Software Development and Support Department

- Directed a data informatics project involving big data analytics and machine learning for developing an automated mortgage approval classifier using Support Vector Machine and clustering algorithms. The application was deployed in a Major Mortgage Bank.
- Directed the supply chain management efforts of several local government procurement agencies
- Directed the source selection processes for several colleges and universities.
- Designed and worked as the project manager and team leader for eRFP Proposal Evaluation System
- Performed detailed Data Warehousing/Data Mining service for eRFP clients
- Migrated several client organizations from Excel based system to Database based system
- Worked as the Systems architect for Sysoft® eGDSS Decision Support System
- Designed, developed and worked as instructional manager for Sysoft® eBusiness Program
- Worked as Systems Engineer for Sysoft® Web Application Framework

- Worked as the Systems Engineer and Development Team Leader for Sysoft® KnowledgeWiz an intelligent information portal management system implemented for Johnson and Johnson and later distributed to other clients
- Designed and developed the information portal for a major international newspaper
- Developed the iNet+ examination for CompTIA (Computer Trade Industry Association)
- Manages Web Servers, Firewalls, Internet/Intranet/Extranet Architecture for Sysoft®
- Worked with Sysoft® Web Application framework for BMW Corporation
- Designed, developed, and maintained a web-based database application for Region2000 project in Lynchburg, VA, Department of Labor
- Presented Sysoft's eRFP software in National Institute of Government Purchasing (NIGP) Annual Forum in 2005, Anaheim, CA
- Designed and developed requirements and implemented the same with the help of professional developers Web based Active Server Page Applications for Pharmaceutical Companies, Financial Institutions, Government and Telecom Companies
- Designed, developed, and taught technical courses on eCommerce and eBusiness in Telcordia
- Designed, developed, and managed Sysoft's eBusiness Webmaster Certification Program
- Led a team of 20 professional programmers in various assignments. Clients included AT&T, Lucent, IBM, Prudential, Siemens, Telcordia, Johnson and Johnson, Verizon, Merck, and many other companies.

PROFESSIONAL EXPERTISE

Systems Management

- Systems Engineering, Requirements Development and Analysis, Software Architecture, Regression Testing, Customer Acceptance Testing, Network Security Architecture

Database Management

- Data Warehousing/Data Mining, SQL Server, Oracle, Access, SQL, Web Programming with SQL, ODBC/JDBC

Web Application Development

- ASP, XML, JavaScript, CSS, VBScript, SQL, Python, Cold Fusion, WAP, Web Graphics, DHTML, Java, CGI/Perl, PHP, Web Architecture, Security, Firewall, Network Architecture, PhotoShop, Flash, Image Ready, Fireworks, Illustrator, Captivate, PaintShop Pro, Gif Construction Set (Animator), Web Magic

Productive Tools

- Excel, PowerPoint, Access, Word, VISIO, Tableau, PowerBI

PAPERS/PUBLICATIONS

Aerospace cybersecurity threat vector assessment

Sheema Mirchandani, Sam Adhikari

Conference Paper AIAA 2020-4116

Session: Cybersecurity Technologies and Methodologies

Published Online: 2 Nov 2020 <https://doi.org/10.2514/6.2020-4116>

Cybersecurity Threat Vector Assessment for Aviation Assets

Sam Adhikari, Sheema Mirchandani, Paul Edward

Conference Paper AIAA 2020

Published 8 June 2020 Business AIAA AVIATION 2020 FORUM

Integrating Risk Assessment Modeling with Aviation Cybersecurity Framework

Sheema Mirchandani

Conference Paper AIAA 2020-2932

Session: Aviation Cybersecurity Framework (Invited)

Published Online: 8 Jun 2020 <https://doi.org/10.2514/6.2020-2932>

ACADEMIC EXPERIENCE

2015–Present Rutgers, the State University of NJ Newark, NJ, Instructor, Professional Practice

2009–2015 Rutgers, the State University of NJ Newark, NJ, Adjunct Faculty

Taught the following courses.

- Structured Programming Applications 2017-2021
- Database Management Systems 2016-2021
- Cyber Security 2016-2020
- Management Information Systems 2009-2020
- Information Technology for Managers 2011-2021
- Business Statistics 2012-2013
- Designing and Creating Websites 2010-2020
- Production & Operation Management. 2010-2020
- Computer and Network Applications 2016-2020
- Datawarehousing and Datamining 2009

1997–Present Sysoft Center for Software Excellence, NJ Iselin, NJ, Faculty

Taught and developed the following courses for NJ Department of Education licensed training program

- Database Management Systems, Data Warehousing/Data Mining, SQL Server, Oracle, Access, Excel, PowerPoint, MS Office, eBusiness and Web development technologies
- Developed courses on Web Application, Database integration, and Data Warehousing/Data mining.

2007 Fairleigh Dickinson University, NJ Floram Park, NJ, Adjunct Faculty

Taught the following courses.

- Management Information Systems Fall 2007

EDUCATION AND PROFESSIONAL CERTIFICATIONS

- ISACA Certified Data Privacy Solutions Engineer, 2021
- iNet Advanced Webmaster and eBusiness Architect, 2002
- Certified eBusiness Webmaster, 2001, 2017
- iNet+ certification, CompTIA, 1999
- Masters in Computer Applications, Sysoft Center for Software Excellence, 1998
- BS in Business Management, Pune University, 1996

PROFESSIONAL AFFILIATION

- ISACA, New York Chapter
- IEEE, Princeton/Central Jersey Section, NJ
- ISM (Institute of Supply Management)
- NIGP (National Institute of Government Purchasing)
- AIAA - Aerospace Cybersecurity Working Group (ACWG)

PUBLICATIONS & PRESENTATIONS

- Presentation(s) at the National Institute of Government Purchasing Annual Forum, **August 2021**,
(a) Solicitations Integrated Environment for Database Driven eProcurement, Contract Management, Supplier Performance, KPIs, and Spend Analytics for Best Value Sourcing
(b) Cost Models for Construction
- **Technical Paper** Session: CS-03, Aviation Cybersecurity Framework (**Invited**), **June 2020**
Presented Integrating Risk Assessment Modeling with Aviation Cybersecurity Framework
- **Technical Paper** Session: CS-02, Autonomous, Proactive, and Intelligent Cyber Defense for Aviation (**Invited**), **June 2020** Presented Cybersecurity Threat Vector Assessment for Aviation Assets
- Presentation(s) at National Institute of Government Purchasing Annual Forum, TN **August 2018**
(a) RFP Proposal Evaluation Best Practices: Cost Models, Upset Levels, Audit Trail, Transparency, Consensus versus Individual Scoring, Process Flexibility
(b) Protecting your Data: Using Blockchain and Smart Contracts to Reduce Cost, Enhance Cybersecurity, Transparency, and Audit Trail for Procurement, RFP, and Contract Management Systems
- Presentation(s) at NCMA World Congress, Ohio, **July 2018**
(a) Best Value Sourcing Cost Models: Using Excel and Web-based Systems
(b) Cybersecurity for Enterprise-Level Procurement and Contract Management Systems
- Presentation(s) at National Institute of Government Purchasing Annual Forum, Salt Lake City, Utah **August 2017**
(a) Big Data Analytics in Supply Chain, Proposal Evaluation, and Procurement Cost Reduction,
(b) Bringing Audit Trail and Transparency in Public Sourcing,
(c) Vendor Performance Analytics to improve operational efficiency
(d) Various Cost Models for Smart Evaluation of Proposals.
- Speaker at ISM-EVA, Norfolk, VA **May 2016** Supply Chain Metrics and Vendor Performance Measurement
- ISM-Philadelphia **Feb 2016** Computers in Purchasing, Electronic Commerce (e-commerce)
- Presented at the **May 2016**, Big Data in Biomedicine: Enabling Precision Health conference Poster Session, Stanford University.
- Application of Big Data Analytics in Biochemical Engineering Applications of Cell Free Protein assemblies and folding for novel therapeutic development. Presented at the Technical Showcase at the Big Data in Biomedicine Conference on **May 2016**

- Proposal Evaluation and supplier performance analysis, Presentation at National Institute of Government Purchasing Annual Forum, Kansas City, MO, **August 2015**.
- Cost Models in Proposal Evaluations, National Institute of Government Purchasing Annual Forum and Product Expo, **August 2010**, San Antonio, TX.
- Sysoft Contract Management System, Webex online presentation, HCC, **August 2010**.
- Proposal Evaluation System and Process Architecture, NY State OASAS, **July 2010**.
- Data Analysis in Big Data Paradigm, Sysoft White Paper, **June 2010**.
- Sysoft eRFP Proposal Evaluation Tool, DGS, Commonwealth of Pennsylvania, **September 2009**.
- Best Practices in Contract Performance Measurement, Sysoft White Paper, **June 2009**.
- SWAF- configuration Management with Web Application Framework, Sysoft White Paper, **April 2009**.