

# Thomas Polchowski

## CAREER OBJECTIVE

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Lead the design and implementation of innovative technology solutions in a challenging environment where engineering and leadership skills can contribute to a company's organizational excellence.

## SKILL PROFILE

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**Practices and Principles:** Systems engineering, software architecture and design, project management, client management, organizational change management, Agile methodologies, business process analysis

**Technology Capabilities:** Information sharing/collaboration, data management, SOA, cloud computing

**Key Markets:** Available upon request

**Primary Development Experience:** Java SE/EE, PHP, DHTML, SQL, XML, SOAP, REST, RSS/ATOM, LDAP

## SECURITY CLEARANCES

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Available upon request

## CERTIFICATIONS

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PMI Project Management Professional (PMP)

Change Management Advanced Practitioner (CMAP)

International Consortium for Agile Associate (ICAA)

Sun Certified Enterprise Architect (SCEA)

Multiple Sun Certifications (SCWCD, SCBCD, SCJD, SCJP)

## PROFESSIONAL EXPERIENCE

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### Senior Associate

### Booz Allen Hamilton

November 2004 - Present

*Additional program and market context is available upon request*

#### Leadership and Business Development

- Led the 34 member software engineering team for a government program. Worked daily with the client chief engineer, and led the successful execution of \$7M/year in software development, and \$25M in revenue over 4 years in the role.
- Oversaw engineering task statement development and costing, accounting for \$8M/year in revenue to the firm.
- Led the engineering task area for a winning re-compete proposal, valued at \$99M+ over 5 years. Bid as the software engineering lead, a key position for the contract.
- Authored numerous white papers for the firm and clients on topics including service-based information sharing, data warehousing, cross domain solutions, data management, and open source alternatives.
- Co-envisioned, authored, and delivered a Technology Focus Group presentation to the firm on enabling information sharing in government. Addressed multiple dimensions of information sharing challenges, including organizational, cultural, legal, financial, and technical. Supported local and remote attendees to help apply previous information sharing successes to their specific challenges.
- Contributed to the development of a vision and strategy for a program, which was endorsed by the client. Led the integration of both architecture and product roadmapping into the program strategy.
- Served as a "Front Line Leader" on a Booz Allen "home team". Managed 18 staff members, and provided mentorship across the 40-person team. Spearheaded initiatives to build advocacy for the mission and business.
- Received firm's Values In Practice award, the firm's highest employee recognition.
- Authored 25+ assessments of junior and senior staff members, including 7 promotion cases. Delegated and oversaw numerous additional staff assessments that were well received.
- Authored numerous awards for team members, and contributed to two Values In Practice award submissions that were successfully awarded, resulting in improved morale and team confidence.
- Led resource management activities, including the requisition development, screening, interviewing, hiring, onboarding, mentoring, assessing, and placing of Booz Allen employees.
- Worked with firm leaders to identify opportunities for staff members. Identified and secured billable work for staff in need, and kept direct staff highly-utilized at approximately 95%.

#### Project Management, Systems Engineering, and Innovation

- Managed and mentored 7 task leads across 12 on-going development initiatives, and maintained program-level accountability for the financial, schedule, and risk management. The majority of projects were completed under budget, and nearly all stayed within 1-2% of projections, significantly outperforming industry expectations. Successful management resulted in positive perception and trust from clients, and follow-on funding each year.

- Led the design and implementation of a \$950k data warehousing solution that accounted for future dataflows to multiple security classifications. Managed a staff of 15 data architects, technologists, and security engineers. Designed a flexible and scalable architecture, and developed a four-year roadmap.
- Oversaw the systems engineering management plan for a program, covering all aspects of the engineering lifecycle. Conducted process improvement activities such as introducing tailored agile practices while supporting government requirements. Resulted in increased efficiency and reduced time-to-market.
- Took a leadership role in proactively improving the integration between engineering and operational disciplines under an ITIL framework. Implemented a Quality Assurance Manager role on the team, developed processes, created templates, and trained software engineering staff. The improved processes contributed to the team's accomplishment of releasing over 300 software deployments per year with a release success rate of over 98%.
- Managed initiatives within Booz Allen Hamilton's Open Source Community of Practice, including the evaluation of open source alternatives to commercial software, the creation of prototypes, and the generation of white papers. Developed an intranet presence and harvested intellectual capital. Proposed R&D initiatives and received marketing funding. Demonstrated open source viability across many capabilities, as well as illustrated Booz Allen's dedication to innovation and investment.
- Led the creation of an open source analytical tool suite including a portal, geospatial information systems, business intelligence, timeline analysis, network visualization, content management, single-sign-on, and ETL. Presented market-targeted demonstrations to Booz Allen partners, receiving strong interest in pursuing open source in client engagements. Leveraged the investment on two client initiatives.
- Recommended a Web 2.0-based open source portal solution to a client in order to reduce licensing costs and allow for flexibility. Worked with the Liferay CEO and CFO to provide cost-saving recommendations, which were accepted and resulted in a \$700k portal migration initiative that reduced the overall portal TCO.

### **Distinguished Architecture and Development Initiatives**

- Led aspects of a top priority enterprise portal migration, involving \$1M in software, hardware, and labor. Proposed a portal server architecture based on performance, scalability, and licensing. Participated in the network infrastructure design and researched global site load balancing, seamless failover, virtual IP, hardware-based SSL, and CIFS technologies.  
**Primary Technologies: Oracle/Plumtree Portal, Oracle 10g, WebLogic Server**
- Designed/developed software and integrated COTS modules as part of a 7 year, \$20M initiative to augment an enterprise environment. Proposed integration strategies for technologies such as a geospatial information system, business intelligence reporting, link visualization, keyword search, predictive analysis, web services, and collaboration technologies.  
**Primary Technologies: Oracle/Plumtree Portal, Java EE**
- Designed and implemented the security model for an enterprise portal serving a 3000-user community and supporting multiple cross-cutting collaboration needs. Designed role-based models to support future clients.  
**Primary Technologies: Oracle/Plumtree Portal, Java EE, Hibernate, DHTML**

**Senior Software Developer**

**J.Brown Agency**

**June 2000 - September 2004**

### **Distinguished Architecture and Development Initiatives**

- Coordinated information in multiple offices by implementing a transparent service-oriented distributed computing framework using an XML-RPC methodology. Programmed supplementary asynchronous queuing functionality and ensured data integrity. Integrated systems residing on different platforms.  
**Primary Technologies: Java EE, ColdFusion, JDBC, Servlets, XML, SQL**
- Integrated industry retailer data into marketing databases. Extrapolated layers of information to simplify the user view of data, using data warehousing concepts. Proposed and developed detailed reports.  
**Primary Technologies: Crystal Reports, T-SQL**
- Enhanced reliability and robustness of J.Brown's software by leading an initiative to migrate legacy system components to Java. Minimized impacts on users by proposing and executing interim solution integration  
**Primary Technologies: Java EE, EJB, Servlets, Swing, T-SQL**

### **Team Leadership, Business Development, and Personal Growth**

- Led the technology side of new business initiatives for clients such as Avaya, BIC, and International Dairy Queen. Proposed concepts to promote client services and products in international markets. Presented software demonstrations to client representatives to secure projects individually yielding over \$50k.
- Collaborated with client representatives, internal account teams, and management executives to conceive and design software for client companies such as Kraft Foods, Nabisco, Clorox, and Tropicana. Gathered business requirements and explained design specifications to non-technical client representatives.
- Managed all client technical issues and coordinated with account teams to ensure client confidence.

## Independent Consultant

### Distinguished Consulting Initiatives and Personal Development Projects

- Envisioned, designed, and implemented a database-agnostic data management system with web-based and REST interfaces to create database tables, enter and validate information, and produce reports. Integrated system with Excel and Pentaho Reports for data analysis.  
**Primary Technologies: PHP, T-SQL, REST, Microsoft Office Integration, Pentaho, DHTML and JavaScript**
- Envisioned, architected, and developed a web-based email client with support for user and group management, multiple email protocols, and a rules engine for mail filtering. Leveraged open source jASEN libraries to integrate anti-spam support.  
**Primary Technologies: Java, Java EE, EJB, Struts, SQL, JavaMail, JSP, DHTML and JavaScript**
- Envisioned, designed, and configured a portal solution using a JBoss open source portal framework. Developed custom portlets based on the JSR 168 specification, including a multi-threaded custom RSS/ATOM feed aggregator with AJAX support, a financial dashboard to interface into an existing financial tracking system, an email portlet with EJB interfaces into an existing email system, and several additional custom portlets.  
**Primary Technologies: Java, Java EE, EJB, JSF, Web Services, AJAX, JBoss Portal, DHTML and JavaScript**
- Developed an approach for integrating personal devices and technologies with multiple social media platforms (Facebook, Twitter, and a personal blog). Developed "glue-code" to support email inputs, integration between APIs such as Facebook's Graph API, email and text alerts, and RSS aggregation.  
**Primary Technologies: RSS, ATOM, JSON, SMS, SMTP, IMAP**
- Co-designed and co-developed a digital image management system to be deployed to kiosk terminals. Developed a service-oriented capability to upload remote images to a central server, allowing users to manage images online, and differentiating the application from its competition at the time.  
**Primary Technologies: Visual Basic .NET, ASP.NET, SQL**
- Co-developed a mobile device-enabled survey engine with a web service-based communication framework. Designed and developed an XML parsing module deployed on mobile devices to facilitate communication.  
**Primary Technologies: Mobile device-supported Visual Basic .NET, XML**
- Envisioned, designed, and co-developed a collaboration website for University of Connecticut college students, leveraging Web 2.0 social media concepts in 2001. Provided capabilities that allowed students to communicate and contribute data. Marketed the website across campus and observed favorable usage.  
**Primary Technologies: PHP, T-SQL, DHTML and JavaScript**

## EDUCATION AND PROFESSIONAL MEMBERSHIPS

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### Johns Hopkins University

- Obtained the degree of Masters of Science in Information and Telecommunication Systems for Business, with a 4.0/4.0 cumulative GPA.
- Obtained a graduate certificate in Competitive Intelligence, with a 4.0/4.0 cumulative GPA.
- Received the Edward J. Stegman Memorial Award for Excellence in Business Scholarship.
- Led the technical approach for a capstone team in support of The Nature Conservancy (TNC). Proposed a solution to reduce the redundancy of development efforts across field offices, and received highly positive feedback and appreciation from the client. Solution included social media-based collaboration, organizational change management, marketing materials, and a methodology for analyzing technical alternatives.

### University of Connecticut

- Obtained the degree of Bachelor of Science in Computer Science and Engineering, with Dean's List recognitions.

### International Institute of Electrical and Electronics Engineers

- Member of the IEEE professional organization and Computer Society