



**David G. Theus**  
**Senior Consultant**  
[dgtheus@proaaci.com](mailto:dgtheus@proaaci.com)

## **Professional Experience**

**2011 – inno360, Inc.**

Vice President, Technology

Responsible for product strategy, management and development as well as leading the company's field operations/customer support.

**2010 – Professional Analysis and Consulting, Inc.**

Senior Consultant

Responsible for mechanical engineering analyses using computer based finite element and other simulation methods. Work typically involves load and stress, deflection, vibration, fluid flow and similar areas of interest. Industry experience includes GE Aircraft Engines and MSC, supplier of analysis software.

**2010 - 2011 inno360, LLC.**

Director, Operations

Principal duties include: Technical Field Operations Management, Strategic Account Management, Product Development/Management Liaison

**2010 - Theus Consulting Services, LLC.**

Owner

Principal offerings include: Enterprise Software Program Management, Simulation Services; Simulation Lifecycle/Data Management Consulting, Process Automation Services, Account Management

**2009 – 2010**                    **MSC.Software Corporation**

Senior Account Executive, Americas General Business

Principal duties included: maximize profitable revenue through selling Enterprise Solution Systems, building a new name for the business in specialty industries – specifically consumer packaged goods throughout North America, account responsibility for Procter & Gamble, General Mills, Graham Packaging, Duracell, Energizer, etc.

**2007-2009**                    **MSC.Software Corporation**

Enterprise Program Manager, Americas Field Operations

Principal duties included: liaising with field sales, professional services, field technical and PD during proposal development to ensure deliverable content and pricing realism, liaising with the customer prior to and after contract award to ensure alignment of expectations and requirements, program oversight to ensure delivery to requirements, cost and schedule, and to quickly resolve issues and problems.

**2006-2007**                    **MSC.Software Corporation**

Enterprise Business Solutions Consultant, Americas Field Operations

Responsible for the Americas focused on Enterprise Solutions; instrumental in closing new business at Whirlpool, Procter & Gamble, General Electric.

**2005**                            **MSC.Software Corporation**

Account Manager/Sales Driver, Americas Field Operations

Responsible for the central region territory focused on specific named accounts.

**2003-2005**                    **MSC.Software Corporation**

Manager, Professional Services

Led Knowledge Capture and Process Consulting Group for the Americas East Service organization. Responsibilities included major projects project management, marketing and selling virtual product development (VPD) professional service engineering solutions, process consulting, development and delivery of custom VPD software and hardware systems; managed a staff of 14 direct reports and third party consultants; instrumental in growing and developing Simulation Data Management Offerings and Implementations.

**2002-2003**                    **MSC.Software Corporation**

Project Manager, Professional Services

Responsible for managing customer-funded professional services projects consisting of custom software development, commercial software integration, and high performance computing deployment. Also responsible for marketing and selling professional service solutions including process consulting and knowledge capture.

**2000-2002**                    **MSC.Software Corporation**

Project Engineer, Integration and Engineering Solutions

Responsible for the overall performance of customer-funded integration and engineering software solutions; including requirements definition assessment, proposal, development, testing, documentation, and delivery of custom engineering software solutions. Solutions consist of commercial-off-the-shelf (COTS), custom and proprietary engineering software. Also responsible for marketing and selling integration and engineering software solutions as well as completing engineering analyses of complex structural, thermal and fluid systems.

**1999-2000**                    **MSC.Software Corporation**

Application Engineer, Central Region

Field application engineer providing general technical support focused in pre and post sales activity, working independently with area customers to support the use of MSC products to maintain a high degree of customer satisfaction, assisting sales in developing and managing implementation plans for new MSC customers, as well as, instructing MSC Institute training classes and customer on-site courses as required.

**1998-2000**                    **MSC.Software Corporation**

Technical Account Manager/On-site Application Engineer,  
Central Region

Responsible for providing on-site technical support to General Electric Aircraft Engines, Cincinnati, Ohio. Primary focus on assisting GEAE engineers and users of MSC products achieve their objectives with respect to the use of those products. Regularly communicated market requirements and product enhancements of GEAE employed applications to MSC GEAE account manager in order to increase capabilities in this area. Included coordination of on-site training, consulting on specific programs, mentoring, and uncovering new opportunities as well as developing, implementing, and testing MSC solutions in the GEAE Linked Model Environment.

**1997-1998**                    **General Electric Aircraft Engines**

JSF High Pressure Compressor Design Engineer/Analyst, Advanced  
Engineering Dept.

Responsible for the conceptual and detailed mechanical design and engineering of rotating hardware on the Joint Strike Fighter cold section. This included stress, vibration, and failure analyses of the high pressure compressor rotating hardware. Further responsibilities included coordination of materials, manufacturing, and drafting personnel to meet technical and affordability requirements.

**1994-1997**                      **General Electric Aircraft Engines**

Technical Leadership Program Design & Development Program Engineer,  
Various Depts.

GP7000 Rotating Parts Compressor Design Engineer/Analyst. GE/KLM Field Service Technical Representative (Amsterdam, Netherlands). GE90 Rotating Parts Fan Design Engineer/Analyst.

GE90 Rotor Dynamics Engineer. Marine & Industrial Main Engine Assembly Process Engineer.

**1990-1994**                      **General Electric Aircraft Engines**

Engineering Co-Op, Various Departments

Rotating Parts Life-Management and Stress Analysis Engineer (4 Semesters). Airfoil Manufacturing Process Control Engineer (1 Semester).

**ACADEMIC**

1994 – 1997                      *University of Cincinnati*; Master of Science

Structural Engineering Major/Dynamics Minor

Thesis: The Redesign of the General Electric GE90 Spinner for Bird Impact: Determining Critical Bird Shot Locations (Explicit Nonlinear FSI)

1989 - 1994                      *University of Dayton*; Bachelor of Mechanical Engineering

Mechanical Engineering Major/Management Minor

**SOFTWARE TOOLS**

Analysis:	SimXpert, Patran, Nastran, Dytran, LS/DYNA, ANSYS, others
CAD:	Unigraphics, Pro/E, Catia
Programming Languages:	Fortran, PCL, HTML, XML, Java, Ant, Velocity, Javascript, Python, PHP, others
Misc:	Unix, Linux, Windows, Mac, Oracle, DB2, Websphere, MS SQL, Eclipse, JBuilder, MS Visio, MSC.SimManager, Mindmap, MS Project, MS Visio

## **SIGNIFICANT PROJECTS / TECHNICAL REPORTS**

1. Contributor to a Value Based Total Cost of Ownership financial business model specifically for the application of product development software solutions.
2. Solution Architect and Project Manager for a J2EE based, automated driveline design and engineering virtual product development environment. (MSC.SimManager)
3. Solution Architect, Project Manager and Developer for a J2EE based, automated cylinder design and engineering virtual product development environment [PCL, XML, Java, Apache-Tomcat, Oracle, Ant], 2000-2004. (MSC.SimManager)
4. Solution Architect, Project Manager and Developer for a J2EE based, automated automotive gas tank virtual product development environment [PCL, XML, Java, Apache-Tomcat, MS SQL Server, MSC COTS, third party COTS], 2002-2004. (MSC.SimManager)
5. Solution Architect, Project Manager and Developer for a Custom software solution for automated manufacturing CFD simulation environment [PCL, Java, proprietary CFD Solver, COTS CFD postprocessor, COTS statistical analysis tool], 2003.
6. Developer of Custom Software for Automated Wheel Analysis Using MSC.Acumen (PCL and XML), 2000.
7. Developer of Custom Software for an Automotive Engineering Simulation Environment (Generic Application), 1999.
8. Customer specific MSC Intranet Web Site (General Electric Aircraft Engines) Using Hypertext Markup Language (HTML), 1998.
9. The Redesign of the General Electric GE90 Spinner for Bird Impact: Determining Critical Bird Shot Locations; 1997 (University of Cincinnati Masters Thesis).
10. Passive Data Collection to Measure Rowers' Performance of The University of Dayton Crew Team; co-authored with Eric Davidson; 1994 (University of Dayton Senior Design Project).

## **AFFILIATIONS and HONORS**

American Society of Mechanical Engineers (1990-1994).

MSC.Software Corporation Americas Special Recognition Award – FY 2006.

MSC.Software Corporation Central Region, Sales Excellence Award – Q4 2005.

MSC.Software Corporation, Central Region, Top Technical Performer – Q2 1998, Q1 2000.

GE Management Award: GE90 Spinner Redesign (Significant Cost/Weight Savings).

GE Management Award: GP7000 HPC Cost/Weight Estimates.

GE Management Award: GE90 Engine Balancing Techniques.