Todd A. Schultz, PhD

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Preface

Seek not to be a success but, rather, to be of value. Albert Einstein

Todd Schultz combines a strong practitioner background in software development, enterprise software, database applications, and applied mathematics with a distinguished academic career emphasizing building those skills in students and enhancing them through his research. His career to date has straddled that middle ground between analytics or decision sciences and more business-oriented enterprise software and database applications. Focused on applications of information technologies and mathematics, he has successfully integrated Microsoft technologies – Dynamics, SQL Server including Analysis Services and Data Mining, Visual Studio and .Net, Expression Studio, Azure, Windows Server, Power BI, Project, Visio, Access, among others – across his teaching, research, consulting, and mentoring of colleagues. In addition, he has played a leadership and evangelist role for the information and decision sciences discipline broadly and for Microsoft technologies in particular.

Education

- Ph D, The Johns Hopkins University, 1987. Major: Operations Research; Dissertation: Mathematical Programming and Stochastic Games
- Master of Science in Engineering, The Johns Hopkins University, 1983. Major: Operations Research
- BS, Georgia Institute of Technology, 1979. Major: Management Science, High Honor, Cooperative Program

Professional Positions

- Analyst, Central Intelligence Agency. (December 1975 September 1978). Telemetry analysis and algorithm development, scientific and simulation software development, application of computer graphics, applied statistical analysis, and research and preparation of finished intelligence.
- Programmer Analyst, American Management Systems. (August 1979 March 1982). Financial and accounting systems development and programming; database programming; quantitative modeling development and application; enterprise financial systems integration.
- Manager, Ernst & Young. (May 1982 April 1986). Progressing from an intern to full-time employment as manager, performed and led enterprise financial systems implementations, business process controls reviews, and forecasting and estimation modeling engagements.

Professor, Augusta University (September 1987 – present).

Progressing from assistant to full and then retired / rehired emeritus professor in 2017 with three years – 2007 to 2010 – as associate dean, contributed excellence in teaching, research, service, and academic administration in the areas of information systems and management science; highlights (beyond teaching and research outlined below) include:

- **Curriculum development** Personally led development of new programs in MIS and Applied Information Technologies (supplementing an existing Computer Science BS); established departmental curriculum standards based on .Net and Microsoft Dynamics; assisted development of program focus areas in analytics and information assurance & security; a leader in building hybrid (part online, part face-to-face) courses and programs.
- **Consulting** Performed a number of regional engagements (primarily gratis or for university contributions but occasionally paid) with corporations, government, and non-profits in areas such as manufacturing schedule optimization, location and logistics analysis, quality and statistical process control, economic impact studies, business process redesign and automation, software acquisition and implementation guidance.
- **Professional service** Worked closely with local chapters of APICs, PMI, ISM and developer professionals to create on campus professional development and student contact; developed significant student employment relationships with a number of local and regional firms; via key positions (e.g., Senior Editor of Journal of Information Systems Education and Chair of the Microsoft Dynamics Academic Alliance Advisory Council) continue to enhance linkages between academic and professional practice.
- Academic administration Served for three years (understood by all not to be a long term goal) as associate dean with responsibilities for course scheduling for the entire College, outcomes assessment, faculty evaluation and development, supporting maintenance of AACSB accreditation, developing 'executive style' MBA offerings, and selection of full-time and adjunct faculty.
- Academic service Deep involvement in committees devoted to curriculum development at College and University levels; play a key role in academic and administrative software license selection and maintenance within the College; unofficial chair (the College is not departmentalized) of the computing sciences discipline group helping to manage eight faculty, sixty-one separate courses, and three information technology related degree programs.

Teaching

Engaging students – and myself – with ideas and technologies that are so exciting, compelling, and productive that I just have to share them is the key driver for my teaching energy and enthusiasm. The intersection of enterprise systems, software development, business processes, and applied mathematics has such significant applications across disciplines that I am reluctant to limit the scope by narrowing to a specific list of "courses I teach" which often represents the needs of the institution or availability and skills of faculty more than it demonstrates the range of capabilities of an instructor. Some courses I have recently delivered with excellence and enthusiasm in a challenging and supportive environment for the learner include:

- **Database Management Systems** (for information systems and technology majors) emphasizing application, practice, and deployment along with traditional theoretical basics applying primarily Microsoft SQL Server and Microsoft Azure.
- Management Information Systems (for junior level business majors from all disciplines) which goes beyond illuminating the standard descriptive topics to providing significant, hands-on development of professional deliverables using, e.g., Microsoft Project, Microsoft Visio, Microsoft Expression Web and significantly Microsoft Dynamics in addition to more typical applications of spreadsheets, desktop databases, presentation software, and document development.
- **Supply Chain Management** (for junior and senior management and MIS majors) building a descriptive understanding of how business processes articulate the value chain, applying standard models of operations management, performing simulated SCM decision making, and applying Dynamics enterprise software.

- Accounting Information Systems (for junior and senior accounting majors) delivering information systems principles from an accounting perspective emphasizing information technology enabled business processes, applications of information systems to internal controls, use of Dynamics for accounting practice, and development of accounting oriented database applications and spreadsheet analyses.
- Finite Mathematics for Business & Economics (for junior level business majors from all disciplines) emphasizing development, computer-based solution, and interpretation of relevant models in addition to the necessary theoretical grounding in mathematics.
- **Management of Information Technology** (for MBA students) emphasizing strategic, organizational, business-process, and managerial understanding and skills along with grounding and practice in relevant, high productivity software and applications.

Again, these are simply recent examples. There are many areas where my interests and capabilities in teaching have been and can be productively applied in the right environment.

Recent Research

Refereed Journal & Proceedings Articles (since 2008)

- Schultz, T.A., Zadeh, Amir H., Zolbanin, Hamed M., Sengupta, Arijit (2020). Enhancing ERP Learning Outcomes through Microsoft Dynamics. *Journal of Information Systems Education* 31(2).
- Schultz, T.A., Harris, Ranida, Riggins, Frederick J. (2016) Lightweight 'Sandbox' Hosting for Academic Use of Microsoft Dynamics. *Proceedings of DynAA 2016* 7(1).
- Schultz, T.A., Harris, Ranida. (2016) Teaching ERP Implementation with Microsoft Dynamics Sure Step. *Journal of Integrated Enterprise Applications* 5(1).
- Schultz, T. A. (2014). Toward a MOOC for Dynamics GP (1st ed., vol. 5). Proceedings of the Worldwide Microsoft Dynamics Preconference. 50.241.208.82/dynaa2014/papers/P014DYNAA2014.pdf
- Schultz, T. A. (2012). Illustrating Process Enabling Information Technologies with Microsoft Dynamics. *Journal of Computing Sciences in Colleges* 28(2).
- Schultz, T. A., Jovicic, B., Djuric, D. (2012). Agile Software Development Applications to ERP: Discussion and Illustration Using Dynamics AX. *Journal of Integrated Enterprise Systems* 1(1).
- Schultz, T.A., Grayson, J.M. (2011) Practical Insights on Pitfalls in Estimating Queue Performance. International Journal of Information and Operations Management Education 4(2) 122-133.
- Siegel, P. H., Schultz, T. A. (2011). Social Skills Preferences Among Internal Auditors--An Explanatory Study Using the FIRO-B. *The Journal of Applied Business Research*, 27(3), 43-54.
- Siegel, P. H., Landy, S., Schultz, T. A. (2011). Formal versus Informal Mentoring Of MAS Professionals. *Journal of Applied Business Research*, 27(2), 5-12.
- Schultz, T. A. (2010). Data Mining and Knowledge Prospecting with SQL Server Analysis Services. *The Journal of Computing Sciences in Colleges, 26*(2).
- Zhang, G. L., McDowell, W., Schultz, T. A. (2010). Individual differences on intentions to use strong passwords. *Issues in Information Systems*, *11(1)*, *553-558*.
- Schultz, T. A. (2008). A Test Driven Approach in Introductory Access VBA. *Journal of Computing in Higher Education*, 24(2), 151-156.

Schultz, T. A. (2008). Design Patterns for Test Driven Development. *Issues in Information* Schultz Vita updated March 2023 Systems, 9(2), 294-299.

Schultz, T. A., Grayson, J. (2008). Putting Some Science in Management Science: Investigating Little's Law. International Journal of Information and Operations Management Education, 2(3), 302-314.

Conference Proceedings, Presentations, Book Reviews, & Other Contributions (since 2010)

- Schultz, T.A., Microsoft Academic Conference for Higher Education, "Microsoft Developer and IT Essentials: Apply State-of-the-Art Information Technologies at No Cost" (June 2017).
- Schultz, T. A., Microsoft Convergence, "Ask Your Peers: Cloud and Web Client Technologies," Microsoft, Atlanta, GA. (March 2014).
- Schultz, T. A., Microsoft Dynamics Academic Preconference, "How Microsoft Azure + Win 8 development + DreamSpark + DynAA = incredible," Microsoft, Atlanta, GA. (March 2014).
- Schultz, T. A., Dynamics Academic Alliance Training, "Microsoft Dynamics AX for the University Classroom," Microsoft, Atlanta, GA. (February 2014).
- Schultz, T. A. (2013). Enterprise Resource Planning Systems: Some Observations on Adoptions by Healthcare Enterprises. Georgia Bio Life Sciences. gabio.org/displaycommon.cfm?an=1&subarticlenbr=97
- Schultz, T. A., DSI Annual Meeting 2013, "Microsoft Dynamics for the Supply Chain Management Course," Decision Sciences Institute, Baltimore. (November 2013).
- Schultz, T. A., GPUG Summit 2013, "Education, Research, & the Next Generation: How DynAA and GPUG Make a Difference," GP User Group, Tampa, FL. (October 2013).
- Schultz, T.A. (2012) *Applying Microsoft's BI Stack in the Business School Classroom*, Orlando FL, Business Intelligence Congress of National ICIS. [Presentation]
- Schultz, T.A. (2012) Illustrating Process Enabling Information Technologies with Microsoft Dynamics, San Francisco CA: Decision Sciences Institute National Conference. [Presentation]
- Grayson, J., Schultz, T. A. (2012). Practitioner Insights on Estimating Queue Performance. Huntington Beach, CA: INFORMS Conference on Business Analytics and Operations Research. [Presentation]
- Schultz, T. A. (2010). Virtualized Installations: An Effective Path for Broadening Dynamics' Academic Reach (vol. Euro2010). Microsoft Dynamics Academic Alliance Preconference. [Proceedings & Presentation]
- Schultz, T. A. (2010). *Predictive Data Mining of CRM Data for Marketers and Manager*. The Proceedings of North American Microsoft Dynamics Academic Alliance Preconference. [Proceedings & Presentation]
- Schultz, T. A. (2010) Jacksonville Code Camp, "Integrating SSAS Analytics Into .Net Applications," Jacksonville, FL. (August). [Presentation]
- Schultz, T. A. (2010) CodeStock, "Building Confidence with SSAS Predictive Modeling," East Tennessee .Net Users Group, Inc., Knoxville, TN. (June). [Presentation]
- Miller, J., Schultz, T. A. (2010), American Accounting Association, "Quick Results Using QuickBooks in a Principles Course," American Accounting Association, Mobile, Alabama. (April). [Presentation]

Schultz, T. A. (2010) Columbia Code Camp, "SQL Server Analysis Services," Columbia Enterprise Schultz Vita updated March 2023 Developer's Guild, Columbia, SC. (January). [Presentation]