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SUMMARY

All my academic choices, large and small, have revolved around a simple question: How can I best help the people (students, colleagues, Information Technology practitioners and users, community members around the university) with whom I interact in person or by sharing knowledge?

- I have chosen to work at West Virginia University for most of my academic career (21+ years from 2003 to the present) since I find teaching and mentoring significant numbers of first-generation college students both meaningful and rewarding. In about 90 courses over these 21 years, I have taught my students the most current software technologies and development methodologies and ensured that they deeply understood systems development concepts by applying them on real-life projects. The underlying motivation is for our MIS students to have the same job and career opportunities as students from better known universities and affluent communities. These courses and projects have been among the major reasons that our MIS students have had close to 100% placement for the past 15+ years, with several getting jobs in the best IT consulting (Deloitte, Ernst & Young, KPMG, PwC) and software development companies (IBM, Microsoft and Google).
- I met, discussed, advised (as Chair of the MIS P&T Committee) and collaborated on multiple research projects with three young tenure-track assistant professors who joined the MIS department between 2014 - 2016 (Dr. Nazir, Dr. Collignon and Dr. Price). The meetings and discussions were to ensure that they knew they were valued members of the department. The research collaborations resulted in publications that contributed to all three of them getting tenure and promotion.
- My research has focused on providing insights to IT practitioners on designing and developing software systems that are user-centric, enabling end users to control and use the systems in ways that are meaningful to them rather than making end-users powerless automatons (or even entirely replacing people with automated systems).
- Most of our students' projects have been systems designed and developed for non-profit organizations in the local community such as systems for the largest volunteer run spay-neuter organization in the county, an organization addressing food insecurity for school children in the community, and a local police department that needed a system for their very specific vehicle service scheduling.

EDUCATION

- Ph.D. in Information Systems, University of Cincinnati, College of Business Administration, 1998.
- MBA, University of Madras, India, 1989.
- Bachelor's degree in Electronics and Communication Engineering, Annamalai University, India, 1987.

ACADEMIC EMPLOYMENT EXPERIENCE

Associate Professor of MIS, West Virginia University, Morgantown, WV 2009 – Present
John Chambers College of Business and Economics.

Assistant Professor of MIS, West Virginia University, Morgantown, WV 2003 – 2009
John Chambers College of Business and Economics.

Assistant Professor of CSIS, Pace University, New York, NY
School of Computer Science and Information Systems.

1997 – 2003

Instructor and Teaching/Research Assistant, University of Cincinnati, Cincinnati, OH
College of Business Administration.

1992 – 1997

Research Assistant, University of Illinois, Urbana-Champaign, IL.
College of Business Administration.

1990 – 1991

RESEARCH: REFEREED JOURNAL PUBLICATIONS

Research Summary

From the time I got tenure in 2009 to about 2015, my focus was mainly on teaching (explained in more detail in the section on teaching). However, between 2014-2016, the MIS department hired three tenure-track assistant professors and I started getting back into research by initiating and working with each of them on several research projects. All the papers from these research projects were targeted at the best MIS journals, resulting in five publications since 2019. Three of them were published in A+ journals, one in an A journal and one in a reputed B journal. *Information & Management* and *European Journal of Information Systems* are both ranked A+ in the ABDC journal quality list (<https://abdc.edu.au/abdc-journal-quality-list/>) and are in the Senior MIS Scholars list of 12 premier journals (<https://aisnet.org/page/SeniorScholarListofPremierJournals>).

The *European Journal of Information Systems* paper (Creating “Informating” Systems Using Agile Development Practices: An Action Research Study) was based on a 3-year-long action research project that involved designing and developing an application for the business college and makes a particularly significant and unique contribution to MIS research literature as well as software development practice. This paper shows how to apply what is considered one of the first and best-known theoretical concepts in the MIS discipline (Zuboff’s concepts of automating and informing developed in the mid-1980s) into software design and development practice - something that hasn’t been shown or done in any other MIS research. Andrew Burton-Jones who just finished a 3-year term as the MIS Quarterly editor in chief, wrote an article about these fundamental MIS theoretical concepts and the inexplicable lack of research on its application in this paper: <https://www.sciencedirect.com/science/article/abs/pii/S1471772714000104>). Another unique contribution of this paper was the detailed explanation of how action research was practiced, a rare research methodology used in less than 1% of published papers. As a part of this research project, a software system was designed and developed by the researchers. This system was used for several years by the business college academic advisors to make admission decisions. The accepting editor for the paper was Michael Myers (<https://profiles.auckland.ac.nz/m-myers>), considered one of the most prominent qualitative researchers in the MIS discipline over the past 30 years, whose decision to publish this paper emphasized the uniqueness of the research methodology and the application of Zuboff’s theoretical concepts.

It should be noted that this publication record was accomplished under two constraints that not many MIS researchers in R1 institutions are likely to encounter:

- I was teaching at least four very technical courses that required a lot of time and effort: (a) preparation time to learn and prepare teaching material on constantly changing technologies and (b) meeting time with students for ensuring their understanding due to the complexity of the material (as noted in the teaching section, very few other MIS programs in the US have the technical depth and strength of our MIS program).
- Our MIS department does not have a doctoral program that typically helps improve research productivity.

Published as an associate professor since 2019

- Nazir, S., Collignon, S., Surendra, N. (2024). Understanding Collective Ownership in Agile Development: Turbo Charging the Process. *Information and Management*, 61(6). (A+ in ABDC list and in Premier Journals list)
- Nazir, S., Kleist, V., Surendra, N., Peace, G. (2024). Informating and Automating in Systems Design: Extending the Zuboffian View of Technology Ready-to-Use vs. Technology Unintuitive-to-Use. *Journal of Global Information Technology Management*, 27(3), 200–221. (B in ABDC list)
- Nazir, S., Price, B., Kopp, K. K., Surendra, N. (2022). Adapting Agile Development Practices for Hyper-Agile Environments: Lessons Learned from a COVID-19 Emergency Response Research Project. *Information Technology and Management*, 23, 193–211. (A in college list)
- Collignon, S., Nazir, S., Surendra, N. (2022). Agile Systems Development: Privacy Theoretical Lens to Challenge the Full Information Disclosure Paradigm. *Information & Management*, 59(6). (A+ in ABDC list and in Premier Journals list)
- Surendra, N., Nazir, S. (2019). Creating “Informating” Systems Using Agile Development Practices: An Action Research Study. *European Journal of Information Systems*, 28(5), 549-565. (A+ in ABDC list and in Premier Journals list).

Published as an assistant professor prior to getting tenure and promotion in 2009

- Surendra, N., Denton, J. (2009). Information Systems Research-In-Practice: An Exploratory Study. *Review of Business Research*, 9(3).
- Surendra, N., Peace, G. (2009). A Conceptual Analysis of Group Privacy in the Virtual Environment. *International Journal of Networking and Virtual Organizations*, 6(6), 543-557.
- Surendra, N., Denton, J. (2009). Designing IS Curricula for Practical Relevance: Applying Baseball’s ‘Moneyball’ Theory. *Journal of Information Systems Education*, 20(1), 77-86.
- Surendra, N., Denton, J. (2009). Discussion-less Discussion Databases: Detecting and Resolving Breakdowns Using an Ethnographic Research Approach. *Journal of Systems and Information Technology*, 11(2), 131-149.
- Surendra, N. (2009). Agile development as an enabler of mindful IT innovation adoption: Lessons from an action research project. *Journal of Decision Systems*, 18(1), 99-116.
- Surendra, N., Peace, G., Connolly, D. (2008). The Ethics of IT Disaster Recovery Planning: Five Case Studies. *Journal of IS Security*, 4(1), 23-42.
- Surendra, N. (2008). Using an Ethnographic Process to Conduct Requirements Analysis for Agile Systems Development. *Information Technology and Management*, 9(1), 55-69.
- Peace, G., Surendra, N. (2007). The Technology Choice for a System Design Course: Proprietary versus Open Source. *Journal of Informatics Education and Research*, 9(1), 29-50.
- Denton, J., Kleist, V., Surendra, N. (2005). "Curriculum and Course Design: A New Approach Using Quality Function Deployment". *Journal of Education for Business*, 81(2), 111-117.
- Surendra, N. (2000). Designing and Teaching an E-Commerce Course: A Case Study. *Journal of Informatics Education and Research (Special issue on "Curriculum Issues in Teaching E-Commerce and the Web")*.

TEACHING

Teaching Summary

After getting tenure and being promoted to associate professor in 2009, my focus was almost entirely on teaching MIS students the most current technology and software development methods for the next 6-7 years. I was teaching four of the five core technical systems courses in the MIS major along with elective courses for what was current at that time such as iOS and Android app development. I was aware that these courses were among the most important reasons in helping our MIS students have one of the highest job placement rates in the college and among the highest starting salaries. So, I decided to focus on what helped the MIS students, but it also resulted in reduced research productivity from 2009 to 2016. When these placements and starting salary numbers started to be publicized, the MIS enrollments increased rapidly. Also, due to this unusual technical strength of the MIS program (very few other MIS programs in Business Colleges in the US have our department's technical strength and depth), the university and college started two new technically focused graduate programs in Data Analytics and Cybersecurity. It was when three tenure-track assistant professors were hired during 2014-16 who were also teaching technical courses, that I reduced my singular focus on teaching since the students could learn advanced technical content from them as well.

The focus in all my courses is teaching students the most-up-to-date software development methods and technologies used by software development professionals and having them deeply understand those concepts and technologies by applying them on real-world projects. The motivation for doing so is that our MIS students should be well prepared for the best job and career opportunities. For example, in the systems analysis, design and development courses I taught in Spring 2023, I emphasized understanding how to complement the newly introduced Visual Studio Copilot for programming projects using the new Microsoft .NET Multi Application User Interface (MAUI) application, Cloud Computing (Using Azure for Deploying a Model-View-Controller Web Application with SQL Server Azure database) and Continuous Integration / Continuous Deployment (CI / CD) using Azure DevOps. Learning these concepts and technologies enabled students to rigorously apply Agile Development and Test-Driven Development principles and practices. Since it would take a combination of several MIS textbooks to cover the different topics covered in these courses (agile project management, continuous integration / continuous deployment, object-oriented design and programming, MVC and MAUI app development, unit testing, relational database design and querying, cloud computing), I prepared extensive notes for the students as well as recorded all of our class discussions. I provided feedback on a weekly basis to students on their individual projects and met with every group (there were a total of 18 groups) for 15-30 minutes once every two weeks to discuss progress on their group project. Several of these group projects were real-world projects for non-profit organizations like Mountaineer Spay & Neuter Assistance Program (M- SNAP) and community service / outreach projects for WVU Extensions Services.

I have prepared, built and taught all the MIS technical Systems courses from scratch, starting from 2003 to present:

- MIST 352 (12 courses): Business applications programming: In 2003, I converted it from an outdated Visual Basic programming course into an object-oriented design and programming course using Java and C#.
- MIST 353: (12 courses): Advanced Information Technology: This was designed as a “bridge” course for our two-semester sequence of Systems Analysis, Design and Development courses (MIST 450 & 452). This course was designed to cover concepts and fill gaps based on technologies and architectures we were using in the Systems courses: [Java & Oracle or C# & SQL Server], [3-tier, MVC, or database-centric architecture].
- MIST 450 (27 courses): Systems Analysis
- MIST 452 (25 courses): Systems Design & Development.
 - MIST 450 and 452 is the two-course sequence that is the foundation for our MIS students to learn and understand the entire systems development lifecycle by doing all the phases involved in the process on a real-world project. I modify at least 25% of the course content every semester to incorporate the latest technologies and software development methodologies.

- Mobile Apps Development (2 courses): In 2011-12, when mobile apps were becoming popular, I taught two mobile app development courses as electives: iOS app development in fall 2011 and Android app development in spring 2012.
- Everyday Data Analysis (2 courses): Taught Honors College students two courses on applying data analysis to everyday situations and decisions.

In addition, I have taught several independent studies to help MIS students get certifications or to learn a specific technology such as Internet Of Technology (IoT) apps with Arduino and Bluetooth. A course I taught during spring 2023 is an example of the extent to which I have gone to help our MIS students find the best job / organization for them. I developed and taught an entirely new course on algorithms and data structures (as a third course on a pro bono basis that met for 2-3 hours every week in addition to my two Systems courses during that semester) for six MIS students who had shown a strong interest and aptitude for software development in my Systems courses. The purpose of this course was to give them a chance of interviewing with best known software companies like Microsoft, Google, Apple, Amazon, and Facebook. Questions on different types of searches, trees, graphs, analysis of algorithms are asked in these companies' interviews and without this knowledge even our best MIS students didn't have a chance of getting selected.

Based on the feedback I have gotten from MIS students and graduates (sometimes several years after they graduate) and companies hiring our students and graduates, the courses I have taught help (a) provide our students' a deep understanding of software development, (b) their placement in internships and jobs and (c) their job performance even several years after they have been in that job.

I am also proud of the fact that several of the students I taught felt they benefited to an extent where they have chosen to keep in contact and come back to (a) teach Systems courses as instructors and teaching assistants (Jaren Straughn, Preston Hafer, Kelsey Rhodes, and Alexandra Hafer to name a few) and (b) recruit our current students in companies where they currently work (Kelsey Rhodes and Maria Grieco at Deloitte, Jaren Straughn at UPMC, Brendan Barlament at Plus Consulting, and Brenton Jakiel at IBM to name a few).

Teaching awards

- Excellence in Teaching Award, School of Computer Science and Information Systems, Pace University. (2001).
- Excellence in Teaching Award for a Graduate Student, College of Business Administration, University of Cincinnati. (1995).

SERVICE

Service Summary

My two most important service contributions have been as a MIS P&T Committee Chair for 10 years from 2014 to 2023 (was a Committee Member for 3 years before that) and my work with student placement.

As the MIS department enrollment grew and the Data Analytics graduate program was started in the MIS department, three tenure-track assistant professors joined between 2014 and 2016. As the MIS P&T Committee Chair, I met, advised and worked with them to help keep them on track for achieving tenure and promotion in a timely manner as well as to make it known to them that they were valued in the department. As I discussed in the Research section, I initiated and collaborated on multiple research projects with all three of them that resulted in research publications. These publications played a role in all three getting tenure and promotion to associate professors. One of the service contributions that I cherish the most is that not only did all three achieve the desired result, but they also had positive experiences in the process of achieving that result.

To help place MIS students / graduates in internships and full-time positions, I meet with every MIS senior who is graduating to discuss his / her plans and options. I also have a number of meetings and email / phone communications with representatives from companies that have previously hired our students (for the May 2023 placement, I communicated with Deloitte, KPMG, Ernst & Young, PwC, IBM, Dick's Sporting Goods, Neudesic Consulting, Plus Consulting and M&S Consulting). These efforts in coordination with the college's career services center and other MIS faculty members helped keep our placement rates above 90% for May 2023 graduates. We had our most successful placement in the Big Four consulting companies (Deloitte, Ernst & Young, KPMG and PwC), fifteen May 2023 MIS graduates (out of a total of about sixty MIS graduates) got job offers from these four companies.

I mentor and work with the Systems student groups on community service / outreach projects for their Systems Design and Development course projects. These student groups have developed software to help several local non-profit organizations such as:

- Mountaineer Spay & Neuter Assistance Program (M- SNAP) that provides spay and neutering assistance for pet owners unable to afford those procedures for their pets.
- Pantry Plus More that helps address food insecurity for school children in the Mon county schools.
- Granville Police Department for a very unique and customized vehicle fleet service management system.
- Several community-based projects through WVU Extension Services.

Service awards

- Outstanding Service Award, Chambers College of Business and Economics, WVU (December 2011).
- WVU Value Coin, Dr. Olga Bruyaka. (August 15, 2022 - May 15, 2023).