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## EDUCATIONAL BACKGROUND

|       |           |   |  |
|-------|-----------|---|--|
| M.S.  | 1996-1997 | <a href="#">University of Illinois</a>        | <a href="#">Graduate School of Library and Info. Science</a><br>Administration, Digital Architecture, Big Data, and Gamification |
| Ph.D. | 1991-1995 | <a href="#">University of Illinois</a>        | <a href="#">Dept. of Theoretical and Applied Mechanics</a><br>Stability of stratified fluid flows, Catastrophe theory            |
|       | 1989-1991 | <a href="#">University of Illinois</a>        | <a href="#">Dept. of Mathematics</a> [advisor died]<br>Fractal geometry  |
| M.Sc. | 1986-1989 | <a href="#">University of Oxford</a>          | <a href="#">Mathematical Institute</a><br>Soil Mechanics, Biomathematics   |
| B.S.  | 1982-1986 | <a href="#">University of Central Florida</a> | <a href="#">Department of Mathematics</a>  |

## EMPLOYMENT HISTORY – PERSONAL NOTE

I left Illinois College after 4 years of employment to take care of my remaining parent. A few years ago, my father was diagnosed with Alzheimer's, and I made the difficult decision to have him leave his home in Orlando, and return to his native Denmark while also providing quality management and leadership to Illinois College. I decided to give my father my complete attention until his resettlement in May 2017. On a transitional basis, I accepted a directorship at a nearby public library to offer them structure, guidance and growth, and I look forward to resuming my academic library duties as part of my professional trajectory.

## EMPLOYMENT HISTORY – LIBRARY (Responsibilities and accomplishments in brief:)

|   |                                  |                  |
|---|----------------------------------|------------------|
| 6/2012–6/2016   | <a href="#">Illinois College</a> | Library Director |
| <ul style="list-style-type: none"><li>▪ Supervise 8 library staff in 31,000 square-foot three level library.</li><li>▪ Manage \$400,000+ materials budget.</li><li>▪ Co-wrote <a href="#">\$200,000 NEH grant</a>.</li><li>▪ Co-wrote <a href="#">\$100,000 Mellon grant</a>.</li><li>▪ Designed \$250,000 <a href="#">Digital Learning Center</a>.</li><li>▪ Designed \$1,400,000 <a href="#">Digital College Archives</a>.</li><li>▪ <a href="#">LEAD USA</a> participant.</li><li>▪ Creator, writer and editor of bi-monthly <a href="#">Library Newsletter</a>.</li><li>▪ Created Concept Map of ACRL literacy standards to help students, faculty, and administrators understand and apply literacy requirements. Implemented 3-tiered competency-based information literacy assessment program and roadmap (freshman—engage; sophomore — explore; junior—experience; and senior—emerge).</li><li>▪ Started Library's annual student <a href="#">Banned Book Contest</a>.</li><li>▪ Exhibit creator, promoter, and personal sponsor of Student Photography.</li><li>▪ Exhibit creator and promoter of Interactive Book Art in the Library.</li><li>▪ Designed dashboard for library services and resources.</li><li>▪ Developed journal core profile for accreditation and budget forecasting.</li><li>▪ Performed first collection-wide book weeding in 25 years.</li></ul> |                                  |                  |

## EMPLOYMENT HISTORY – LIBRARY (Responsibilities and accomplishments in brief:) (cont.)

9/2010–5/2012

[Rockford University](#)

Library Director

- Supervised 5 library staff in 106,410 square-foot three level library.
- Managed \$250,000+ materials budget.
- Library program coordinator for [Sheryl WuDunn, author of Half The Sky](#) visit.
- Judge of secondary educ. teachers in [Golden Apple Observer Program](#).
- Conversation leader of 12 foreign students in ESL program.
- Creator, writer and editor of monthly Library Newsletter.
- Created and led SmartBoard sessions for faculty.
- Created and led Technology Boot Camp for staff.
- Developed custom information literacy modules.
- Secured \$18,000+ cash unrestricted.
- Secured \$111,000 funding for Center for Early Literacy Learning & Digital Learning Center.
- Established college grading rubric and benchmarking process for information literacy.

*Left for professional advancement.*

05/2009 – 8/2010

[U.Texas – Arlington](#)

Sci &Eng Librarian

- Supervised librarians on serial projects.
- Co-managed reference materials budget of \$30,000+.
- Developed in-house database tracking of faculty works.
- Managed Cisco's Digital Media Suite for SEL's Digital Signage.
- [Upward Bound](#) science teacher.
- Developed online templates for Camtasia and Flash-based tutorials.
- Wrote, directed, and starred in the Science and Engineering Library's first video tour.

*Left for professional advancement.*

4/2005 – 12/2007

[Baker College](#)

Librarian

- Supervised one librarian on database projects.
- Co-managed materials budget of \$92,000+.
- Helped plan and design of \$1 million library renovation and expansion including hearth stone fireplace and children's curriculum space.
- Designed and maintained Library's and Culinary Arts' web portal.
- Developed in-house monograph database and its graphical SWOT-based analysis tools to calibrate collection for currency, usage and accreditation.

*Left for professional advancement.*

## EMPLOYMENT HISTORY – LIBRARY (Responsibilities and accomplishments in brief:) (cont.)

3/2002 – 8/2002

[Shapiro Science Library](#), [U of M](#)

Math&Phys Librarian

- Supervised librarians on self-directed serials projects (quoted in [SIAM](#)).
- Managed \$800,000+ materials budget.
- Redeveloped science library's website.
- Proposed Pharos' Uniprint realized \$147,000 in print savings.

*Left to join fiancée on west coast of Michigan.*

1/2000 – 3/2002

[Vernon G Grove Library](#), [MSU](#)

Math Librarian

- Supervised library assistant and 16+ work study students in one-level 6681 square-foot library.
- Managed \$250,040 materials budget.
- Secured first and largest cash donation to math library (\$20,000).
- Managed MSU's international book collection.
- Oversaw installation of compact shelving (\$155,000).
- Pilot tested GOBI batch ordering saved \$40,000.
- Originated and created "Top 100" resource list.
- Grew research level collection of math videos and journals in down-economy.
- Used JCR impact factors and subscription prices to assist faculty in journal core calibration.
- Developed and maintained database of bibliographic information on author reprints.
- Created and sustained archival Web-based Math Library's monthly newsletter, [MathLibNews](#).
- Created and maintained Branch Libraries homepage, titled Branch Bytes.

*Left for professional advancement.*

1/1998 – 1/2000

[Paul V. Galvin Library](#), [IIT](#)

Sci &Eng Librarian

- Manager, supervisor, and lead architect on [Voices of the Holocaust](#).
- Managed \$45,000+ book budget.
- Principal examiner of 100,000 books as candidates for weeding.
- Developed strategic print and electronic journal collection acquisition policy.

*Left for professional advancement.*

1/1997 – 12/1997

[Grainger Engineering Library](#), [UIUC](#)

Graduate Assistant

- Supervised graduate students in data entry of the Allen T. Green acoustic emission database.
- Participated in file conversion and maintenance for the [Digital Library Initiative](#).
- Wrote questionnaire for user study to determine core faculty journals.
- Maintained faculty works, serial listings, and USPTO databases.

*Left for first professional position.*

## EMPLOYMENT HISTORY – LIBRARY (Responsibilities and accomplishments in brief:) (cont.)

Summer 1996

[GSLIS, UIUC](#)

Workshop Lecturer

- Presented entry-level courses on Computing Fundamentals, Spreadsheet Basics, Unix and the Windows NT Environment for the [Graduate School of Library Information Science](#) (GSLIS).

*Joined UIUC's GSLIS.*

## EMPLOYMENT HISTORY – SCIENCE

|                         |  |                     |
|-------------------------|--|---------------------|
| Fall 2011 – Spring 2012 | <a href="#">Rockford University</a>              | Adjunct             |
| Fall 2009 – Spring 2010 | <a href="#">University of Texas -- Arlington</a> | Adjunct             |
| Fall 2003 – Fall 2007   | <a href="#">Baker College of Muskegon</a>        | Adjunct             |
| Su 2003 – Winter 2005   | <a href="#">Muskegon Community College</a>       | Adjunct             |
| Fall 2002 – Winter 2003 | <a href="#">Grand Valley State University</a>    | Vis Assistant Prof. |
| Spring 2002             | <a href="#">Washtenaw Community College</a>      | Adjunct             |
| Fall 2000 – Spring 2002 | <a href="#">Michigan State University</a>        | Math Instructor     |
| Spring 1999             | <a href="#">Illinois Institute of Technology</a> | Visiting Instructor |
| Fall 1996               | <a href="#">University of Illinois</a>           | Visiting Lecturer   |
| Fall 1995               | <a href="#">Illinois Wesleyan University</a>     | Vis Assistant Prof. |
| 1991 – 1995 (TAM Dept)  | <a href="#">University of Illinois</a>           | Teaching Assistant  |
| 1989 – 1991 (Math Dept) | <a href="#">University of Illinois</a>           | Teaching Assistant  |

## EMPLOYMENT HISTORY – OTHER

**2008—Present** President of FigaCorp., the umbrella organization for several fledgling web-based enterprises: *Vanity Book Press*, showcasing select chapters from aspiring writers to stimulate interest and print sales of their works; *Solutions On Demand*, a searchable fee-based environment featuring solutions to problems in mathematics at the university-level; *Non-Dimensional*, a web-based teaching environment featuring the history and applications of non-dimensional quantities used in the physical sciences; *My Math Books*, an electronic storefront for my publications in mathematics.

**Summer 1996** Assembly line production worker at [Developmental Services Center](#), a non-profit agency providing comprehensive services for developmentally disabled individuals of Champaign and Ford Counties, Illinois. Sorting and re-packing Kraft boxes in timed assembly line environment.

**Spring 1996** Technical production support assistant at [Publication Services, Champaign, Illinois](#). Analyzed and converted client text-book provided media (CD ROM, disk, magnetic tape, FTP, etc.) on multiple platforms for production within 3 days. Also, at Publication Services, pro-

**1982—1993** On-demand technical consultant for Danish Design, Orlando FL. Ensured compliance with U.S. Federal regulations in labeling, and provided technical and language translations.

## RESEARCH PORTFOLIO

My research is broad and deep within STEAM and the Digital Humanities: 1) analyzing and curating Big Data sets; 2) meshing Digital Information Literacy into Writing Across the Curriculum through a course-specific menu-driven approach within the framework of educational reform and the library model, “P+S+P: Produce, Share, and Preserve;” 4) mapping the library field; 5) visualization of diverse large-scale datasets; 6) developing clearinghouses; 7) promulgating “W+S+G: Warehouse, Studio, and Gallery” as the cost-effective, scalable, Future Library; 8) Future Thinking/Inverse Problems; 9) E-portfolio development through the Studio Support Team; and 10) Art Projects.

### E-science

*Prelim Exam Depository*—Searchable Web-based clearing house of preliminary questions in mathematics. Target size of 10,000 currently completed at 16%.

*Biggest Bang for your Buck*—My analysis at University of Michigan in 2002, showed that journals from the Society for Industrial and Applied Mathematics (SIAM), had the highest average impact factor measured by Institute for Scientific Information (ISI) for the lowest average cost. This study has been updated and expanded to other scientific disciplines.

*Dimensionless Numbers*—Searchable Web-based clearing house of dimensionless numbers and their physical relevance.

### Educational Reform

*Writing Across the Curriculum* — Information Literacy is a cornerstone of Institutional Learning Outcomes, and pursued through Writing Across the Curriculum (WAC) with mathematics as the pervasive unifying thread, and is discussed in [waccentral.info](http://waccentral.info). Combining the ACRL 2016’s research-themed [Framework for Information Literacy for Higher Education](#) with WAC into a guided menu-styled course-specific approach improved student performance. Specifically, when student learning outcomes (SLOs) were rewritten as project-based teaching and learning, then the library model, “P+S+P: Produce, Share, and Preserve” was a natural framework for [digital literacy](#).



*What Our Math Majors Think* — This study based on textual analysis of 1065 paragraphs by math education majors, addresses factors influencing attitudes toward teaching and learning math, and is contextualized in terms of the current educational struggles in mathematics known as [Math Wars](#). This study clearly emphasized the need for a customized literacy approach even within a narrowly defined topic.

### Professional Drift

Landmark study of longitudinal averages related to highest administrative attainment, specifically librarianship. See articles by [Parsons](#), [Meyers & Kaufman](#), [Rooks](#), and [McAnally & Downs](#). Visualizing individuals and institutions as spatio-temporal network nodes allows for hereto-for unrecognized similarities and coherent structures. The original inspiration was taken from researchers at Fermilab in the early 1990s with too much time on the hands ... using [Six Degrees of Bacon](#) as a model in high-energy physics.

## RESEARCH PORTFOLIO (Cont.)

### Design Thinking

The library model “W+S+G: Warehouse, Studio, and Gallery” is designed as the cost-effective, scalable, Future Library. From Design Thinking, the WSG library is an agile, flexible, scalable and robust infrastructure combining Gateway, Connector, and Place of Ideas featuring a Warehouse, Studio<sup>2</sup>, and Gallery as Key Performance Indicator ... supporting [metaliteracy](#), intentional and innovative transformational environments for both performing learners\* and conforming learners\*\*, professionalization, and the life-long doer.



Illinois College's Library: exemplifying the WSG model

Design Thinking uses actions towards creating a preferred future and desired beneficial outcomes. Design Thinking is an iterative process yielding intermediate "solutions" that are potential starting points of alternative paths, allowing for redefinition of the initial problem, in a process of co-evolution of problem and solution.

This re-imagination of a library through deliberate consideration of the “[three P's](#)” of workspace collaboration (Proximity, Permission, and Privacy) defines a place/space that is modular, purpose-driven, aesthetically sensitive, and allows for creative interactions. Specifically, this new library model encourages us to

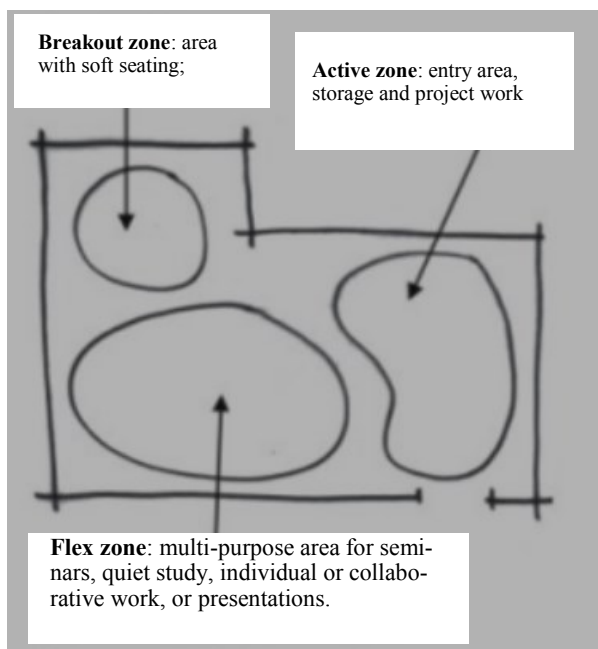
- ::develop new forms of inquiry and knowledge production while reinvigorating old ones;
- ::develop practices expanding scope, enhancing quality, and increasing visibility of research;
- ::develop practices expanding audience and social impact of scholarship;
- ::train new scholars through hands-on, project-based learning complementing classroom-based learning.

The (Learning) Studio evolved from a design pattern for learning spaces first explored and implemented by [Eliel Saarinen at the Crow Island School in Winnetka, Illinois, in 1939](#). This design pattern uses a scalable high-intensive outcome-driven [learning and teaching zones](#) built on [James Dyck's classroom design](#) in which the classroom is divided into three functions/zones:

**Active zone:** entry area, storage and project work;

**Breakout zone:** area with soft seating;

**Flex zone:** multi-purpose area for seminars, quiet study, individual or collaborative work, or presentations.



\*prefer semi-structured environments that stimulate personal value and provide details, tasks, processes, and hands-on interaction; \*\*prefer explicit, safe, comfortable, low-risk learning goals in a linear fashion.



## RESEARCH PORTFOLIO (Cont.)

### Visual Mapping

*Mathematical Theory of Storytelling*—Storytelling forms the human bond that shapes learning, behavior and culture. Modern mathematical treatment is lacking in this fundamental area. A desirable outcome is a representational theory using time, distance, events, morphology and chaos to categorize, analyze and generate stories. This topic nicely combines visual mapping and inverse problems.

*Mapping Equations*—Textual mapping across disciplines significantly enhances our ability to solve problems in one or both spheres. This project seeks to categorize, associate, and map equations across disciplines.

*Visualization of Iterative Maps*—Linear analysis of systems in fluid mechanics yields a constraint equation called a dispersion relation. The solution to this equation yields complex roots that if color-coded by accuracy highlight basins of attraction, and for particularly "sensitive" equations suggest a "fractal nature" of the dispersion relation.

*Visual Navigation of Engineering Disciplines*—Visual non-hierarchical search based on textual input as applied to equations within the engineering disciplines.

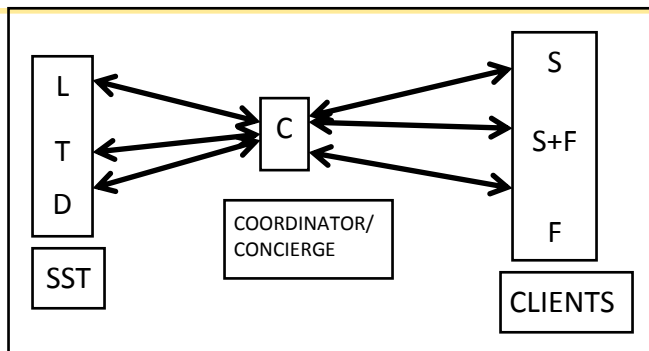
### "Inverse Problems" (from solution to problem)

*Nonlinear ODEs*—My novel approach to constructing exact solutions to frequently encountered non-linear ordinary differential equations (ODEs) extends the work of Kamke, Murphy and Sachdev. Applications range from physical to life sciences!

*Catalogue of Hysteresis Curves*—Materials that return to certain specified shapes after having experienced deformations is of great concern to the manufacturing industry. Non-linear ODEs provide a vital link in modeling this critical behavior in which hysteresis curves are the solutions.

### Studio Support Team

The Studio Support Team (SST) comprised of librarians (L), instructional technologists (T), and instructional designers (D), form a team supporting the WSG library's outcome-driven milieu. The SST assist client projects, through a coordinator (C), from students (S), faculty (F), or student-faculty (S+F) from possibly inception to hopefully conclusion. Examples include traditional research papers enhanced as multi-media production, implementing Open Educational Resource in faculty curricula, and student-faculty engagement by co-writing a paper in the digital humanities.



### Art Projects

Project 1: Catalog and preserve first run book covers and original unique prints by Frederick W. Gookin. An illustrated booklet giving new insight into Gookin's life and journey into Japanese color prints. Project 2: Document, catalog and conserve an extensive Japanese design archive dating from the late Edo to early Showa periods (roughly 1800 to 1939). The collection consists of original source materials, including woodblock pattern books, artisans' sketchbooks, dye samples, fabric stencils and preparatory drawings for kimono and other textiles. The project juxtaposes Japanese design during the Taisho period (1912 to 1926) with actual garments.

## FUNDING AND GRANT WRITING

### ILLINOIS COLLEGE

Co-wrote [\\$200,000 National Endowment](#) for the Humanities Challenge Grant matched with \$600,000 in new donations which will “1) improve the humanities holdings of Schewe Library; 2) strengthen faculty research efforts in the humanities; 3) improve the College’s ability to connect students to the nationally significant historical materials in the College’s Archives; and 4) provide a modest amount to assist us in fundraising.” Managing \$600,000 cash donor gift for Archives.

Co-wrote a [\\$100,000 Mellon Grant](#) to primarily support development and implementation of programming for the Digital Learning Center created through a \$250,000 cash gift.

### ROCKFORD UNIVERSITY

Secured \$20,000 Halderson cash donation toward building an Early Childhood Education Library Area with a SmartTable™, children’s furniture and books. September 2010.

Secured \$500 cash donation from sons of former Rockford University president Chalmers (1934-1937) toward technology for Special Collections. October 2010.

Aligned \$4000 cash sales toward technology, collections, and professional staff and library development. October 2010.

### BAKER COLLEGE

Wrote Jewell grant for digitizing project of Baker College history. 2007.

Wrote Jewell grant for seminar series on Writing Across the Curriculum. 2007.

### MICHIGAN STATE UNIVERSITY

Secured Tomber Endowment (\$20,000) for Math Library – June 21, 2001.

Created prospectus of journal and monographic titles for potential donors to support through endowments – December 2001.

Collected, digitized, and indexed approximately 1000 pages of MSU’s nationally known mathematician (deceased) Professor J. Sutherland Frame’s class notes from 1929-1931 – project ongoing.

### ILLINOIS INSTITUTE OF TECHNOLOGY

Principal Investigator, Institute of Museum and Library Services proposal for the web-based multimedia development of Professor David P. Boder's 70 interviews in Fall of 1946 with survivors of atrocities and oppression during WWII. The earliest recording of such personal histories by a trained psychologist. The Boder Project may be viewed at [Voices of the Holocaust](#). Amount requested \$83,615 – September 1998.

Principal Investigator, Institute of Museum and Library Services National Leadership Grant proposal for the design and implementation of Active Server Pages (ASP) to enable librarians to showcase resources in their databases via the Web. Amount requested \$43,940 – April 1998.

Participated in the data collection and writing of a grant proposal for the CD ROM Center in the amount of \$100,000 – February 1998.



## PUBLICATIONS

- Statistics for the Library Manager. Forthcoming.
- Library Lessons from the Trenches: or How I Learned to Love the Business. Forthcoming.
- Algebra for Triple-Top Students. In Preparation.
- Math Wars: What Our Math Education Majors Think. In Preparation.
- [Writing Across the Curriculum](#).
- Recommended Resources in Ordinary and Partial Differential Equations. [Using the Mathematics Literature](#). Ed. Kristine K. Fowler. Taylor & Francis, 2004.
- [So Many Problems So Little Time: Maps and Mathematics](#). Information Outlook, March 2002.

## COMMITTEES

|                                      |  |
|--------------------------------------|--|
| <a href="#">Illinois College</a>     | Resource Advisory Group; Administrative Services Group; <a href="#">CARLI</a> .  |
| <a href="#">Rockford University</a>  | Academic Council; Graduate Studies; Curriculum; Staff Concerns & Liaisons; <a href="#">Northern Illinois Cooperative</a> . |
| <a href="#">UTexas – Arlington</a>   | Career Status; WebVoyager Advisory; Employee Recognition.  |
| <a href="#">Baker College</a>        | Library Web; Expansion and renovation of the library.  |
| <a href="#">Michigan State U.</a>    | Branch Homepage; Front Door Group (library web pages); IM relay/chat .   |
| <a href="#">Illinois Inst. Tech.</a> | Search committee member for Special Collections, Reference, and the Digital Services/Reference Librarian positions.        |

## MEMBERSHIPS

|  |   |
|--|---|
| <a href="#">American Library Association</a>   | <a href="#">Union League Club of Chicago</a>      |
| <a href="#">Michigan Library Association</a>   | <a href="#">Union League Boys and Girls Clubs</a> |
| <a href="#">Illinois Library Association</a>   | <a href="#">Chicago Engineers' Foundation</a>     |
| <a href="#">The Manuscript Society</a>   |   |
| <a href="#">Fellowship of American Bibliophilic Societies</a>                              |   |
| <a href="#">The Caxton Club</a> , Board Member of Grants Committee                         |   |
| <br>   |   |
| <a href="#">Art Institute of Chicago</a> , Board Member of <a href="#">Textile Society</a> |   |
| <a href="#">Museum of Modern Art (MoMA)</a>  |   |
| <a href="#">Knoxville Museum of Art</a>  |   |
| <a href="#">Luminarts Cultural Foundation</a>  | <a href="#">Poetry Society of America</a>         |
| <a href="#">Grand Rapids Public Museum</a>   |   |
| <a href="#">Saint Louis Science Museum</a>   |   |
| <a href="#">Museum of Fine Arts</a> (St. Petersburg)                                       |   |
| <a href="#">Dali Museum</a>  |   |
| <a href="#">Muskegon Museum of Art</a>   |   |