Legal Informatics – What Records Professionals Need to Know

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Today’s Program

- This presentation will discuss the history of informatics as a discipline.
- It will describe some of the programs and activities at the School of Informatics and Computing, IUPUI.
- It will describe the legal informatics certificate program at the School of Informatics and Computing.
- It will highlight the various ways that legal informatics and records management are intertwined, particularly in the use of technology and also ethical issues.
Last Presented to ARMA in November 2009 (5 years ago)

Many things have happened since then:

- Name change – to School of Informatics and Computing
- School of Library and Information Science – merged into our school and became a Department
- **Approval of legal informatics certificate program – as part of degree but also as a free-standing certificate**
- New departmental structure – so now Informatics program, including legal informatics, is part of the Department of Human-Centered Computing (HCC)
- Grant to create an Informal Learning Space
History of Informatics

- Around the world
- First School of Informatics: University of Edinburgh, Scotland
- Second School of Informatics: Indiana University, 2000
- Since that time, other schools and programs
  - Some called School or College of Informatics, Northern Kentucky University College of Informatics
  - Some developed from Library Science or Information Science programs – the iSchools group [http://www.ischools.org/](http://www.ischools.org/)
  - Some information technology programs have considerable overlap
  - Informatics is found in other schools, such as Nursing Informatics
What is Informatics?

- Understanding the impact technology has on people.
- The development of new uses for technology.
- The application of information technology in the context of another field (legal informatics, health informatics).
- Informatics is a new field of study that gives students the skills to apply information technology to another field - from health care to journalism to biology to economics.
- “Informaticists” can then use technology to harness the power of information and make exciting new discoveries that make us more productive at home and at work.
More Definitions

- A bridge between content areas/disciplines/fields of study and the technology
- “X” informatics – with the X standing for any content area of subject – music informatics, health informatics, bioinformatics, legal informatics, etc.
- A unique curriculum that combines IT concepts with other areas of study, opening rewarding career opportunities for graduates.
Our Undergraduate Programs

☐ Bachelor’s degrees:
  ■ Informatics: students choose an “area of specialization” - one of these choices is legal informatics. Also includes new 5-year BS/MS program
  ■ Media Arts & Science
  ■ Health Information Administration/Management
  ■ Also undergraduate certificates in:
    ☐ Informatics
    ☐ Medical Coding
Our Master’s Programs

- Master’s degrees in:
  - Bioinformatics
  - Health informatics
  - Human-Computer Interaction (HCI)
  - Media Arts & Science
  - Informatics (under development)
  - Collaborations with other schools
    - Masters of Jurisprudence (MJ) at the McKinney School of Law with MS in Informatics or legal informatics certificate
Our Doctoral Programs

- PhD degrees in:
  - Bioinformatics
  - Health Informatics
  - Human-Computer Interaction (HCI)
Because Informatics is such a new, emerging and yet undefined discipline, our faculty members often have backgrounds in a number of academic areas:

- Music
- Fine and applied arts (painting, sculpture)
- Computer Science
- Biology
- Journalism
- Nursing
- Instructional Systems Technology
- Medicine
- Graphic Design
Our Resources and Facilities

- Beautiful new building on the IUPUI campus – corner of West and Michigan Streets
- Outstanding technology resources: labs, computers, software
- Terrific support staff
- Collaboration with non-profit organizations and corporations
- Practical focus: IUPUI’s RISE initiatives
- IUPUI’s Strategic partnerships (international)
Some Interesting Projects

☐ Virtual Worlds and Games
  ■ “Serious Games” (suicide prevention as example)
  ■ In the law context: gamification – for CLE or other legal training (ABA Journal, March 2014)

☐ 3D Printing
  ■ The Virtual Early Flute – exploit the full power of the web (2D and 3D images, sound, animations, text)
  ■ Attempt to recreate flutes from the Baroque era using 3D printing technologies
  ■ Uses in law
  ■ Legal issues
Early Attempt at a Virtual Courthouse
The Virtual Early Flute
<table>
<thead>
<tr>
<th>Home</th>
<th>Early Flute Examples</th>
<th>Instrument History</th>
<th>Resources &amp; Links</th>
<th>News &amp; Events</th>
<th>Contact Me</th>
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Civil War Era Flute With Case
Making a Flute with 3D Printing

- Additive versus subtractive process
- Conical bore
- Four pieces which fit together
- Key
- Modeling software
- Will it play?
What is Legal Informatics?

- Legal informatics has been described as “the study of the application of information technologies to the field of law and the use of these technologies by legal professionals.”
- Therefore, the focus of the legal informatics area of specialization/certificate is on the effective use of cutting-edge technology in the study and practice of law.
- Legal informatics also includes the law related to technology, such as intellectual property law, privacy and security.
History of Legal Informatics

- Used infrequently – most notably in the countries of the European Union and Japan
- In the U.S., “legal information technology”
- IT law/computer law versus IT applied to the practice of law
- Jurimetrics
- Results of research paper I wrote in June 2004
- University of Edinburgh School of Law
- Legal informatics IS NOT legal bibliography
What About Career Opportunities?

- As law firms convert from a paper-based practice to a practice using a full range of software, there are a considerable number of exciting career opportunities.
- Responsibilities could encompass everything from setting up databases of documents for a trial to running all of the software to manage a law firm’s operational functions, such as time-keeping and billing.
- Duties could also include preparing audio, visual and multimedia materials and presentations for accident reconstructions, criminal investigations and to explain the intricacies of machinery and high-tech inventions.
What About Career Opportunities?


- Prediction is that one of the hottest areas for law will be in law + tech – in other words, someone with legal background and strong technology skills.

- A student who pursues the legal informatics as an area of specialization may choose to continue his/her education by attending law school to become an attorney or by seeking the Masters of Jurisprudence (MJ) degree.
Courses in the Legal Informatics Area of Specialization/Certificate

- I350 Foundations in Legal Informatics – Fall (all types of hardware and software used in a law practice and the courtroom)
- N480 Technology and the Law – Spring (covers intellectual property law, contracts, employment agreements, licensing, rights of privacy and publicity issues)
- I330 Legal and Social Informatics of Security – Spring (cybersecurity, including privacy issues)
- I470 Litigation Support Systems and Courtroom Presentations (specialized software tools, especially SmartDraw) - Summer
- I410 Electronic Discovery – Fall

All courses are online

- 15 credit hours
- Free-standing or as part of a degree
- Undergraduate certificate, but all courses also available at graduate level
Examples of Student Work from INFO I470 Litigation Support Systems and Courtroom Presentations

Based on a real-world event – a slip and fall in a pharmacy.
A Year in the Life of Sally Jo Alexander

1. **April 2011**
   - Ms. Alexander trips and falls at DrugMart Pharmacy

2. **May**
   - Still in pain. Visits hospital. X-rays show 3 fractured ribs. Also has a mild concussion, and badly bruised and swollen arms and legs.
   - Develops pneumonia. Kept in hospital 3 additional days.

3. **June**
   - Ms. Alexander visits pharmacy and presents the bill for her injuries. Manager says they will "take care of it."

4. **July**
   - 8 months after receiving the bill, the Pharmacy has made no attempt to pay.

- Photograph of arm
- Photograph of leg

- 8 months after receiving the bill, the Pharmacy has made no attempt to pay.

- 8 months after receiving the bill, the Pharmacy has made no attempt to pay.
Illustration of DrugMart Pharmacy. All measurements in this and the illustrations to follow are approximate.
Pharmacy Floor Plan
Accident Description:

Plaintiff arrived at the pharmacy to pick up her prescription. She entered through the main entrance and crossed the front of the store. She proceeded to walk toward the candy aisle. Upon turning up the aisle, she tripped over shelving units which were placed on the floor. The fall resulted in the plaintiff's injuries.
Event Timeline

4/24/10 Fall at pharmacy (2:30 pm)

4/26/10 Hospital Visit
  Bruising arms & legs
  X Ray
  Fractured ribs
  Concussion

5/3/10 Hospital Visit
  X Ray
  Series of tests
  Broken arm
  Torn ligaments

5/3/10 - 5/9/10
  Admitted to hospital
  Surgery
  Caught pneumonia

6/9/10 Revisit Pharmacy
  Spoke with Manager
  Assured medical expense
  would be covered

1/31/11 Medical expenses still unpaid

2/9/11 Filed suit against pharmacy

January Q1 - 2010
February Q2 - 2010
March Q3 - 2010
April Q4 - 2010
May Q1 - 2011
June Q2 - 2011
July Q3 - 2011
August Q4 - 2011
September
October
November
December
January
February
March

Successful Graphic Artist

During Hospital stay
  Loses four freelance accounts

Loses more accounts

Hospital bills $58,965
  Lost income $42,000
Accident Scene Overhead
Accident Scene Cross-Projection

Legend
- plaintiff
- shelf piece
- butter mints
- stocker
- witness

Missing Shelves

Butter Mints
Technology in a Modern Courtroom…

- Means that law firms, courts and other law-related organizations will need people who have appropriate training in legal informatics (law + tech).

- Electronic discovery as an emerging area in law practice – at the intersection between legal informatics and records management.
Intersection Between Legal Informatics and Records Management

- Legal informatics, especially electronic discovery, but also law firm technology
- Cybersecurity: legal, social, organizational, technological and physical issues as well as privacy rights
- Collection, preservation, accessibility of information/data
- Knowledge management – “big data”, data analytics and visualization, especially using new technologies
- More companies/law firms now recognize information/data as a strategic asset - and need to manage it properly throughout its entire lifecycle (including timely and proper disposal)!
- Competitive intelligence (for the law firm itself and for its clients – emerging trend – see INFO I445)
Challenge for Law Firms

☐ The T-Shaped Lawyer – Nelson and Simek

☐ Quote from the State Bar of Michigan Solo and Small Firm Institute on a law firm’s intellectual capital:
  - 80% of a law firm’s “knowledge” is stored as non-structured data, such as electronic documents and email. (Note: also referred to as “dark data”.)
  - If you can’t access it, you are giving it up.
  - This is knowledge management.
Implications of the Electronic Discovery Reference Model (EDRM)

Potential Ethical Issues with New Technology in Law/Records Management

- Confidentiality – cloud computing, mobile devices, outsourcing, email – see ABA Formal Ethics Opinions
- Technology in the law firm – see ILTSO 2011 Standards
- Handling and using metadata – inadvertent production, electronic discovery rules, spoliation, sanctions
- Ethical issues with interactive websites – when does the attorney-client relationship begin?
- Ethical issues with social media
- Social media and electronic discovery
- Law firm advertising and marketing (especially with social media)
Exciting Service Project

- Microfinance project in Calnali (State of Hidalgo), Mexico
- Funded by Rotary Club of Indianapolis
- Supported by other organizations in Central Indiana and in Mexico
- $51,000 distributed so far – also provides training on financial management, business management, empowerment
- Just celebrated 4-year anniversary – several hundred women have received loans
- Next step is to provide online training materials via iPads and expand into new areas within the State of Hidalgo
Beautiful Vistas
The Communal Bank “The Doves” (Las Palomas)
Cecilia Portillo, Communal Bank *Los Rosales* (The Rose Bushes)

“I am in the communal bank Los Rosales (The Rose Bushes.) I am now in my fourth loan cycle, and thanks to the credits I have received, I have been able to grow my business which has enabled me to improve things for my children.”
Similarities – State of Hidalgo/State of Michigan

My favorite bird is also the symbol of the university in Pachuca – UAEH.

Pastes versus pasties. Both areas were settled by miners who came from the Cornwall region of England.
Cultural Differences - Calnali

- Shaking hands
- First language – Nahuatl (pronunciation: [ˈnaːwətɬ] ) - Uto-Aztecan language family - Collectively they are spoken by an estimated 1.5 million Nahua people.
- Spanish as second language
- Nahuatl words you already know:
  - chocolate
  - avocado
  - chili
  - coyote
  - tomato
For More Information…

☐ School of Informatics and Computing, IUPUI, website: http://soic.iupui.edu/

☐ Legal Informatics website: http://soic.iupui.edu/undergraduate/minors-certificates/legal-informatics/

☐ For my biographical information, see http://soic.iupui.edu/people/sara-hook/
Any Questions?

Thank you for attending today’s ARMA meeting! Have a great day!