Benjamin J. Earnhart

706 East College Street, Apt 5   Cell: (319) 400-3027
Iowa City, Iowa 52245   Work: (319) 335-2887
ben.earnhart@gmail.com

Information Technology/Networks/Hardware/End-User Support/Data Consulting.

Big-picture education: MA in Management Information Systems (August 2002), MA in Sociology (2000).

Hands-on experience: Ten years end-user support, including: hardware installation and repairs, server administration, network administration, statistical and data consultation, and user training. I supervise six student employees in a computer lab, coordinating with ITS and other entities campus-wide to maintain the facilities. I have written numerous database driven web applications and stand-alone applications for research in the Department of Sociology and other departments. As the campus ICPSR Representative, I interact with many departments to facilitate data access, and give presentations on the topic.

Highlights of Knowledge, Skills, and Experiences

MA in MIS. Classes covered a broad range of information technology topics. Some that were of particular interest to me were:

- Artificial Intelligence, Intelligent Agents
- Networks
- Data Mining
- Software Engineering
- Security
- Databases (SQL)

MA in Sociology, with an emphasis in quantitative methodology, including:

- Regression methods, such as OLS, logit, and probit models
- Structural Equations Models (Lisrel)
- Correcting for missing data with multiple imputation
- Multilevel Models (HLM)
- Categorical and limited dependent variables such as multinomial logit, Log-linear, and Tobit models.

Data/Statistics Skills

- Extensive experience with common statistical packages including SAS, SPSS, and Stata, both on the desktop (Windows) and in a client-server (Unix and VAX) environment.
- Deep knowledge of these packages, such as looping, macros, and similar advanced features. Several times I have written complex syntax that replicated the behavior of other software packages; for example, if you access data from the Census Bureau via the Data Ferret, the example syntax has my name in it!
- Experience with many formats of data in transforming data into forms appropriate for analysis.
- Often assist graduate students with their theses and dissertations. Basically, the faculty advisor will tell the graduate student "Go do this additional analysis" and the student panics, having forgotten anything they had learned two years prior about how to perform such an analysis. I help them through these rough spots.
- Please see the "Working Papers" of my website, Earnhart.org, for specific examples of my work.

Hardware and Networking Skills

- Upgraded and repaired many makes and models of PCs (became CompTIA A+ certified professional in 2001). By leveraging all available resources, I ensure that all faculty and graduate students have adequate equipment for teaching and research.
- Network trouble-shooting, desktop and server administration in campus Active Directory network. This covers the gamut of support tasks, from client configuration, to scheduling and verifying backups, to complex Group Policy Object manipulation.
- Physically networked graduate student computing cluster and offices. Physically networked and configured Social Psychology lab in Krakow, Poland, including firewall and NAT servicing. I have

completed several similar projects for the Center for the Study of Group Processes and the Iowa Policy Project.

Programming Skills

Apart from the use of statistical packages discussed above, I also am competent with Active Server Pages (ASP), Microsoft VB.Net, Perl, and Sawtooth Software's Sensus survey programming language. Contracted for and completed several stand-alone research applications such as complex random assignment software. More commonly, I develop web-based applications, such as content management systems that allow people to manage websites via a set of forms, or data-entry systems that allow multi-user access, follow complex skip-patterns and include integrity checks.

One application that has saved *huge* amounts of time and effort over the years is an accounting system for the Department of Sociology. Another major success is a web-based scheduling system for the Social Science Research Center that allows workers (sometimes fifty or more at a time) to schedule themselves and lets managers keep track of their hours.

These programming skills actually blend into "people skills," because the single most important part of getting a project right is to extract enough information from the end-users. No matter how technically skillful a programmer is, it is impossible to have a successful project without a very close relationship to the end-users.

Please see the "Projects" section of my website, Earnhart.org, for more details on some of my projects.

People/Administrative Skills

- Answer any and all "How do I?" and "Why won't it?!?" questions relating to hardware and software for faculty, staff, and graduate students in the Department of Sociology that could have solutions from a brief answer, repairing devices, to extended user training. Tactful, able to see things from the perspective of the user.

- Supervise six employees. With careful hiring, most of the time, this largely takes care of itself, since the demands on lab monitors are pretty minimal beyond "be prompt, be polite." However, when there have been issues such as problem employees, or employees facing harassment, I have been able to manage some rather complex situations.

- Main go-between for department and external university Information Technology services, or the Office of the General Counsel in the case of software licensing.

- Each year, I have taken every available opportunity to bring additional money into the department to maintain facilities and increase our capabilities. These applications generally go out under the signature of the DEO, but are created by our Computer Committee and myself. These requests have varied from software to carpet, from laptops to paint, from Personal Response Systems (clickers) to chairs. There is often input from others, but generally I at least do the drafts and supply all technical details and pricing.