

WALTER L. TURNER - RESUME

Education

Previous

- B.S. in Psychology, cum laude 1974 - Kansas State University (4 year degree completed in 2 years)
- M.B.A. in Business 1976 - Kansas State University
- M.S. Agricultural Economics 1977 - Kansas State University
- 12 hours completed toward MS. in Computer Science KSU 1977
- All the above completed by age 21.

Current

- 3 hours ETSU 1996 at Master's Level in Computer Science
- Completion of all course work for PhD in Information Technology at UNC-Charlotte Fall, 1999 GPA 4.00
- Advancement to PhD Candidate Oct. 2002

Industry Experience

Point Enterprises 2000

Developed intranet based web application for banking teller statistics. Responsible for the user interface. The application included a cell based point and click interface for scheduling and many pages devoted to table maintenance. Application involved the use of HTML/Javascript/DOM on the client side and Java, ADO, and Oracle on the server side.

Independent Consultant 1999

Interface designer for Charlotte-Mecklenberg Police Department for interfacing their client server mobile laptop environment to the NC Department of Criminal Investigation (DCI) mainframe computers. Also defined a flexible software architecture for the department.

Independent Consultant 1994-1999

Lead programmer and designer for Northern Telecom product called: Quick Quote™. The product reduced sales cycle time from 21 days to 1 hour by engineering Nortel PBX systems. Development done in Smalltalk via telecommuting.

Consultant to Northern Telecom project known as 2x. It was a large scale version of Quick Quote for larger Nortel systems. Developed requirements, programmed graphics module for bayface display and served to troubleshoot project problems. Development was in Smalltalk using an OO database. (Some overlap of this project with start in academia in 1995.)

Encompass 1991-1994

Senior System Designer tasked with object oriented design of Enterprise Management tools and class libraries to control a global distributed transaction processing system featuring distributed processing and distributed data in a client-server environment. Also responsible for design of databases in support of this system. All tools are GUI based using OOD and OOP. 1st year and 1/2 was Next-Step using Objective-C. Remainder of time spent using ParcPlace Smalltalk under MS-Windows developing client-server applications with a Sybase host-based database.

FUSYN Corporation 1986 - 1991

Global Software 1990 - 1991 contract - Worked on-site at Wandel & Goltermann, as a developer of test instruments and ATE systems. Wrote drivers, self tests, and control programs in C for UNIX X-windows based ATE product. During one peak-period, wrote and debugged 2700 lines of code in 7 day period. Also participated as member of international team designing product enhancements and database selection. Worked with all levels of company management up through worldwide ATE Systems Chief, based in Germany.

Responsible for all Field Trouble Reports, including creation of the system to manage them, and conducting weekly meetings with the head of several departments regarding problem resolution. Assisted the personnel manager in devising skill summaries for all personnel in ATE division. Conducted strategic planning sessions for German and American staff.

Data Engine - developed data communications system tester for telephony switching systems. System integrated windowed user interface with RS-232,RS-422,RS-485, V.35, GPIB, switching relays, and digital control into one easy-to use product.

Seiscor (div. of Raytheon) - Designed and proposed the program development environment that Seiscor is currently using for all software development.

Programmer Tools - Wrote (in C) the following program development tools used and marketed by FUSYN: windowing package, forms package, editor, and memory file manager.

Remote Inventory' - wrote the user interface for a remote inventory programming tool used for EEPROM programming in telephone transmission products.

Alcatel (ITT) 1987-1988 contract - Worked for 12 months as a part of the 300 SD embedded system development team. The 300SD is Alcatel's DLC (Digital Loop Carrier) product for distributed telephone switching applications. Responsible for development of all I/O code from device interface through application. Development was done in Pascal.

Nelson Data Resources 1983 -1988

Vice President of Nelson Data Resources, an accounting software development firm. Also held the title of Director of Software Development where I was responsible for all development and maintenance of 12 software packages in 3 vertical markets. Also programmed a DOS shell package installed at over 700 locations, a hospital management system, general ledger, accounts payable, and a screen design/program generator system.

Enron (InterNorth) 1981 - 1983

Financial Analyst for Enron. Duties included analysis of acquisitions, divestitures, capital budgeting, and major capital expenditures (\$1 million to \$100 million) for North Liquid Fuels Group. Co-developer of Enron's financial modeling software. Also developed a computer simulation for financial analysis of enhanced oil recovery.

Applied Communications Inc. (ACI) 1980-1981

Manager of the Microsystems Development Group and responsible for all microsystems development, including the following areas: bank security systems, protocol converters, bank networking systems, operating systems, and intelligent terminals. Also responsible for contract negotiation, customer liaison, and special projects as assigned by the President.

| Programming Management – Experience Areas | |
|--|------------------------|
| Inventory | Mortgage Banking |
| Job Costing | Data Collection |
| Accounts Payable | Order Entry |
| Sales Journal | General Journal |
| General Ledger | Construction Costing |
| Governmental Accounting | Operating System |
| Retail Store Management | Hog Production |
| Intelligent Terminals | ATE |
| Point-of-sale Systems | Instrumentation |
| Banking | Experiential Marketing |
| Telephony | |

Computer Related Skills – Programming Languages

| | |
|---------------------|-----------------|
| Visual Basic | HTML |
| Smalltalk (various) | SQL |
| Objective C | C |
| Javascript | JAVA |
| CSS | FORTRAN |
| Pascal | BASIC (various) |
| 8086 Assembler | TAL |
| PHP | ASP |

Computer Related Skills – CASE

| | |
|-----------------|-----|
| Visible Analyst | UML |
| Rational Rose | |

Computer Related Skills – Emulators/Debuggers

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|----------|-----|
| HP64000 | Xdb |
| Codeview | |

Computer Related Skills – Database / File Handlers

| | |
|---------|------------|
| Sybase | MS-Access |
| Dbase | ISAM |
| Btrieve | C-tree |
| FABS | Revelation |
| PC-File | mySql |

System Analysis / Design Experience

| | |
|-------------------------------------|------------------------|
| Database (up to 160 tables in size) | Payroll |
| Accounts Receivable | Time Entry |
| Testing | Project Management |
| General Ledger | Restaurant Management |
| Program Generator | Menuing System |
| Simulation | Church Management |
| Remote Data Telemetry | Operating System |
| Windowing System | Architecture |
| Patient Billing | Screen Design Software |
| Financial Analysis | Patient Admission |
| Communications | Security |
| Library | Law Enforcement |
| Experiential Marketing | Bank Teller Scheduling |

Courses Taught

Undergraduate (University of North Carolina at Asheville)

- CSCI-107 Introduction to Computers and Multimedia Lab
- CSCI-201 Data Structures (in JAVA)
- CSCI-244 Client-Side Internet Technology
- CSCI-342 Systems Analysis and Design Methods
- CSCI-343 Database Management Systems
- CSCI-344 Server-Side Internet Technology
- CSCI-373 Special Topics - Web Technologies
- CSCI-444 Issues in Electronic Commerce
- CSCI-446 System Design Project
- CSCI-379 LSIC Transfer Student Course

Undergraduate (Mars Hill College)

- CS-103 Computer Fundamentals
- CS-157 Internet Homepage I
- CS-202 Computer Applications
- CS-252 Multimedia
- CS-257 Internet Homepage II
- CS-241 Smalltalk I
- CS-242 Smalltalk II
- CS-302 OO Systems Analysis & Design
- CS-303 OO Systems Design & Implementation
- CS-307 Data Communications
- CS-311 Computer Architecture
- CS-315 Database Management Systems
- CS-327 Special Topics
- CS-357 Webmaster

Industry

- Conducted BASIC programming classes for employees and for managers only, Union Pacific Railroad, 1977.
- Installed and trained 1st time and experienced computer users at dozens of customer sites while at Nelson Data Resources and in my company, 1978 - 1990.
- While at Enron corporation, conducted MS-DOS and programming classes. Also installed the 1st PC's at 26 sites, trained the users and supported them, 1981-1983.

Community

- Conducted BASIC programming six-week classes for the general public, 1979.

Academic Service

Department Chairman - Mars Hill College - Computer Science 1997-1998

- New starting salary record set for CS major of \$52,000
- Increased number of majors by 500%
- Developed marketing materials for CS Major
- Developed articulation agreement with ABTech Community College
- New hire date record set for CS-Major, hired 3 semesters before graduation.
- Increased course sections offered per semester by 250%
- Overhauled the entire curriculum, adding 2 more tracks to the major

Committees

- Chairman of MHC Technology Committee for Strategic planning
- MHC Writing Across the Curriculum Committee
- UNCA Ad-hoc Committee on Intellectual Property
- UNCA Library Committee

Other

- Computer Technologies Advisory Committee for ABTech Community College
- Chaired Job Seeker's Workshop at Mars Hill
- Supervised Students (with two other professors) to develop Mars Hill initial web site with 1111 pages with 5666 links and 874 images.
- Member of Management Information Systems Advisory Board for the College of Business Administration, University of Nebraska at Omaha, 1985-1986.

Invited Talks/Panels

- Presenter in the 1996 Speech Communication Association annual convention in San Diego. Served on the following panels:
 - Town Hall: Communication Setting Course for the 21st Century
 - Becoming Central to the 21st Century Academy: Building Alliances Across the Undergraduate Curriculum.
- Chaired Panel on Internet Class Development at CSSC annual meeting, 1997.
- Guest lecturer in Systems Analysis class at UNC-Asheville, 1998.
- Various speaking engagements to present computers and computing to the public.

Editorial Review

- Member Review Panel for IEEE Software 1999 - Current

- Database Book Proposal Review for Franklin, Beedle, & Associates, Inc. 2001

Research/Publications

Research

- **M.B.A. Thesis**, "The Solution of a Milk Truck Routing Problem via Traveling Salesman Analysis." 1974
- **M.S. Agricultural Economics Thesis**, "A Computerized System for Projecting Crop Data on a County and District Basis" 1977
- Schruben, Leonard W., Walter Turner, Joe Tiao, Doyle Jeon, and June Carlson "How Extending Navigation of the Trinity River, Texas Would Affect Transportation Costs of Wheat", **Kansas Agricultural Experiment Station**, 1977.
- Co-author of "National Benefits of Achieving the 1977, 1983, and 1985 Water Quality Goals", done for the Environmental Protection Agency, 1975.
- Co-author of "Economic Impact of Water Pollution Controls on Selected Food Industries - Volume IIX The Fertilizer Industry, done for the National Commission of Water Quality, November, 1975.
- Assisted in the following research projects and associated publications:
 - "Market Survey and Feasibility of Sludge Fertilizers", EPA report no. WA7~R525, Sept 1975.
 - "Economic Analysis of Effluent Guidelines -- Seafood Processing Industry", EPA report no.230/2-74-047, Oct. 1975.
- "Projected Feed Grain Balance for the Area Near Wagner, South Dakota", study written for Development Planning and Development Associates, Manhattan Kansas. Report was incorporated into their overall report "Feasibility for a Beef Packing Plant on the Yankton-Sioux Reservation, Wagner, South Dakota", done for the U.S. Dept of Commerce, 1978.
- "Economic Impact of Proposed Effluent Guidelines -- Miscellaneous Foods and Beverages Industry", EPA report, 4 volume set, 1975.

Refereed Conference Papers

- Turner, Walter L. "Applying Lessons from Industry to Intra-Campus Alliances", **ERIK** (Clearing-house on Reading, English, and Communication) 1996.
- Stylianou, A.C. and Turner, W., "Electronic Academia: A Competitive Analysis Based on the Value Chain Model", **Proceedings of the International Decision Sciences Institute**, Athens, Greece, July 1999.
- Stylianou, A.C. and W. Turner, "HCI Requirements for eBusiness Computing", **Proceedings of the Association of Information Systems**, Long Beach, California, August 2000.

Journal Papers

- Forthcoming in **Computers & Education**: Turner, Walter and Stylianou, A.C., "IT Advantage Assessment Model: Applying an Expanded Value Chain to Academia"

- Submitted to **Information & Management**: Turner, Walter and Stylianou, A.C., "Human Computer Interaction (HCI) Requirements for eCommerce/eBusiness"

Industry Publications

- "House Cost Estimator Program - User's Manual", © 1978, Walter L. Turner
- "Accounts Payable - User's Manual", © 1978, Walter L. Turner
- Graphic Computer Needs Study - assisted Union Pacific Railroad Strategic Planning group 1978
- Logistics System Feasibility Study, done for Union Pacific Railroad. 1979
- NBC External Specification Study - solution to NBC Bank's computer network needs among 230 correspondent banks in 6 state area. Included banking security system design. 1980
- "General Ledger - User's Manual", © 1983 - 1988, Walter L. Turner
- "LazyCoder - Screen I - User's Manual", © 1983 - 1988, Walter L. Turner
- "LazyCoder - Screen II - User's Manual", © 1983 - 1986, Walter L. Turner
- "Master Menu (DOS Shell) - User's Manual", © 1983 - 1986, Walter L. Turner
- "ZTOOLS - Screen Support Module - User's Manual", © 1986, Walter L. Turner
- "ZTOOLS - Base Windows Module - User's Manual", © 1987, Walter L. Turner
- "Data Engine - User's Guide", © 1989, Walter L. Turner
- "Data Engine - Command Reference", © 1990, Walter L. Turner
- "Data Engine - Script Files", © 1990, Walter L. Turner
- "Data Engine - System Management", © 1990, Walter L. Turner