



Southwestern Bell Telephone, Fulbright & Jaworski (Houston), and Phonogram B.V. (Amsterdam), and also for government agencies such as Cheyenne and Arapaho Tribes of Oklahoma, Texas Department of Agriculture, U. S. Customs Service, and classified work.

Further details about my qualifications are included in my Curriculum Vitae attached as Appendix A.

5. I have qualified as an expert witness in other court cases.

6. In the present case I was asked to review the methodology and data analysis approach used in Exhibits A and B of Defendant Fischer's Motion to Transfer Venue and Memorandum of Points and Authorities in Support. My review did not include replicating or re-analyzing the data in Exhibits A and B itself.

## I.

### INTRODUCTION

7. Recent advances in computer and information technology have created the emerging field of data science, commonly referred to as "Big Data." This enables, for the first time, the efficient analysis of incredibly large data sets, such as the billions of internet searches every day on Google, which has over 90% of such queries worldwide. Such analysis extends existing tools from graphing and statistics to these huge data sets.

## II.

### REVIEW

8. Exhibit B presents results from Google Trends (<https://trends.google.com>), a web-based interface to retrieve from Google itself data about internet searches for topics, keywords, phrases, names, etc. The results can be filtered by time period, location (country, region, subregion, metropolitan area, or city), category (arts and entertainment, news, sports, science, health, law and government, etc.), and web search type (images, news, Google Shopping, or YouTube).

9. For example, page 4 of Exhibit B graphs the results by state of Google searches for "ice

cream” from January 6, 2021, through November 2, 2023. This search term was most popular in the state of Rhode Island, *i.e.*, the highest percentage of searches was for “ice cream,” so that percentage is scaled to 100 and other states are normalized by dividing their percentage by Rhode Island’s percentage. North Dakota’s percentage of searches for “ice cream” was half that of Rhode Island’s, so North Dakota is ranked at 50%. In other words, searching “ice cream” online was half as popular in North Dakota as in Rhode Island for that time period.

10. Google Trends can also display a graph of the frequency of a search term over the selected time period, *e.g.*, page 12 of Exhibit B, which demonstrates how searches for the phrase “January 6 Committee” increased around the dates of hearings and publication of findings.

11. As a complement to the user-generated searches analyzed in Exhibit B, Exhibit A considers the publication of news items directed to users. This enables an analysis of the impact of both local and national media on consumer behavior. Among other things, Exhibit A specifically addresses the question of whether or not media had a disproportionate impact on residents of Washington, D.C.

12. This analysis used 1,494,847 unique media mentions and showed on page 3 that the reach to Washington, D.C., residents was 58,005, versus the nationwide average of 31,586, with a standard deviation of 3,879. This means that 99.865% of the country is less than 3 standard deviations above the mean, namely, 43,233, so the Washington, D.C., figure of 58,005 is an extreme outlier at 6.8 standard deviations above the mean.

13. Page 4 of Exhibit A used 2.5% as the conversion factor for reach to viewership, which is the factor commonly used by public relations firms to calculate the advertising value of earned media, as provided by Meltwater (the source of the news item data). In this case, instead of public relations press releases aimed at persuading consumers, it is news articles aimed at persuading consumers.

14. This 2.5% conversion factor provides consistency for comparison purposes. Note,

however, that applying a different percentage to all regions would not change the calculated ratios (e.g., the ratio of Washington, D.C., to Florida). This is because the adjustment factor is included in both the numerator and the denominator, and hence cancels out.

### III.

#### CONCLUSION

15. In my professional opinion, the methodology used in Exhibits A and B is consistent with standard data science practice for analyzing large data sets, and has been appropriately applied.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 14, 2024.

/s/ Walter C. Daugherty

Walter C. Daugherty

## APPENDIX A

### Curriculum Vitae of Walter C. Daugherty

**Walter C. Daugherty**  
**10895 Lakefront Drive**  
**College Station, TX 77845**  
**(979) 845-1308 (Office)**  
**w-daugherty@tamu.edu**

#### EDUCATION

Ed.D., Mathematical Education, Harvard University, Cambridge, Massachusetts, 1977.  
Dissertation: "On the Ordering of Topics in the Teaching of Mathematics."  
Advisor: Marc Lieberman.

M.A.T., Mathematics, Harvard University, Cambridge, Massachusetts, 1967 (age 20).

B.S., Mathematics, Oklahoma Christian College, Oklahoma City, Oklahoma, 1966 (3 years). Minors: Physics and chemistry, German.

#### EXPERIENCE

1973 to present      Daugherty Brothers, Inc., (Computer consultants),  
Bethany, Oklahoma. Co-founder, chairman, and president.  
Clients include IBM Federal Systems Division, New York  
Times, Washington Post, Los Angeles Times, Cheyenne  
and Arapaho Tribes of Oklahoma, Southwestern Bell  
Telephone, Fulbright & Jaworski (Houston), Texas  
Department of Agriculture, Phonogram B.V. (Amsterdam),  
and U. S. Customs Service.

1987 to present      Texas A & M University, College Station, Texas. Visiting  
Assistant Professor/Senior Lecturer/Senior Lecturer Emeritus,  
Departments of Computer Science and Engineering and  
Electrical and Computer Engineering, College of Engineering.

1989-91              Texas A & M University System, College Station, Texas.  
Director, Knowledge Systems Research Center, Computer  
Science Division of the Texas Engineering Experiment  
Station.

- 1984-87                   Blinn College, Brenham, Texas. Computer science instructor. Part-time 1984-86, full-time 1986-87.
- 1978-80                   Rose State College, Midwest City, Oklahoma. Data processing instructor (part-time).
- 1971-73                   ECRM, Bedford, Massachusetts. Systems programmer.
- 1970-71                   Harvard Computing Center, Cambridge, Massachusetts. Telecommunications specialist.
- 1969-70                   Computer-Aided Instruction Laboratory, Harvard University, Cambridge, Massachusetts. Systems programmer.
- 1968-70                   Harvard University, Division of Engineering and Applied Physics, Cambridge, Massachusetts. Teaching fellow (for George Mealy and Thomas Bartee).
- 1967                        Driscoll Junior High School, Brookline, Massachusetts. Mathematics teacher.
- 1967                        University of Oklahoma Medical Center Computing Facility, Oklahoma City, Oklahoma. Programmer.
- 1966                        University of Central Oklahoma Data Processing Center, Edmond, Oklahoma. Programmer.
- 1965                        Oklahoma Christian University of Science and Arts, Oklahoma City, Oklahoma. Statistical programmer.
- 1963                        University of Oklahoma Computer Center, Norman, Oklahoma. Lab instructor.

## RESEARCH AND DESIGN

### 1. Refereed Publications

Daughterity, W. C., and Kish, L. B., “More on the Reference-Grounding-Based Search in Noise-Based Logic,” *Fluctuation and Noise Letters*, Vol. 21, No. 3, 2250023, 2022.

Kish, L. B., and Daughterity, W. C., “Entanglement, and Unsorted Database Search in Noise-Based Logic,” *Applied Sciences*, Vol. 9, No. 15, 3029, 2019.

Kish, L. B., and Daugherty, W. C., "Noise-Based Logic Gates by Operations on the Reference System," *Fluctuation and Noise Letters*, Vol. 17, No. 4, 1850033, 2018.

Daugherty, W. C., and Coulson, R. N., "Knowledge Engineering for Sustainable Agriculture Management," *Proceedings of ICAST 2001 Conference* (Beijing, China, November 2001), 2:266, 2001.

Coulson, R. N., Saarenmaa, H., Daugherty, W. C., Rykiel, E. J., Saunders, M. C., and Fitzgerald, J. W., "A Knowledge System Environment for Ecosystem Management," book chapter in Klopatek, J. and Gardner, R. (eds.), *Landscape Ecological Analysis: Issues and Applications*, Springer-Verlag, 57-79, 1999.

Coulson, R. N., Daugherty, W. C., Rykiel, E. J., Saarenmaa, H., and Saunders, M. C., "The Pragmatism of Ecosystem Management: Planning, Problem Solving and Decision Making with Knowledge-Based Systems," *Proceedings of Eco-Informa '96 Global Networks for Environmental Information Conference* (Lake Buena Vista, Florida, November 1996), 10:342-50, 1996.

Coulson, R. N., Fitzgerald, J. W.\* , Daugherty, W. C., Oliveria, F. L., and Wunneburger, D. F., "Using Spatial Data for Integrated Pest Management in Forest Landscapes," *Proceedings of the 11<sup>th</sup> Conference on Geographic Information Systems: Integrating Spatial Information Technologies for Tomorrow* (Vancouver, British Columbia, Canada, 1997).

Daugherty, W. C.; Harris, C. E., Jr.; and Rabins, M. J., "Introducing Ethics and Professionalism in REU Programs," *Proceedings of the 1995 World Conference on Engineering Education* (Minneapolis, Minnesota, October 1995).

Coulson, R. N., Daugherty, W. C., Vidlak, M. D.\* , Fitzgerald, J. W.\* , Teh, S. H.\* , Oliveria, F. L., Drummond, D. B., and Nettleton, W. A., "Computer-based Planning, Problem Solving, and Decision Making in Forest Health Management: An Implementation of the Knowledge System Environment for the Southern Pine Beetle, ISPBEX-II," *Proceedings of the IUFRO Symposium on Current Topics in Forest Entomology* (Maui, Hawaii), 1995.

Yen, J., Daugherty, W. C., Wang, H.\* , and Rathakrishnan, B.\* , "Self-Tuning and Self-Learning Fuzzy Systems," book chapter in Yen, J., Langari, R., and Zadeh, L. (eds.), *Industrial Applications of Fuzzy Logic and Intelligent Systems*, IEEE Press, 1995.

\* Graduate Research Assistant I funded

Daughterity, W. C., Video review of Introduction to Biological and Artificial Neural Networks for Pattern Recognition, by Steven K. Rogers, in IEEE Transactions on Neural Networks, Vol. 5, No. 5, 1994.

Teh, S. H. \*, Daughterity, W. C., and Coulson, R. N., "A User-Centric Methodology for Building Usable Expert Systems," Proceedings of the 7th International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems (Austin, Texas, May-June 1994), 45-48, 1994.

Daughterity, W. C., "A Neural-Fuzzy System for the Protein Folding Problem," Proceedings of the Third International Workshop on Industrial Fuzzy Control & Intelligent Systems (IFIS '93) (Houston, Texas, December 1993), 47-49, 1993.

Daughterity, W. C., "A Partially Self-Training System for the Protein Folding Problem," Proceedings of the World Congress on Neural Networks (WCNN '93), (Portland, Oregon, July 1993). Invited paper.

Yen, J., Wang, H. \*, and Daughterity, W. C., "Design Issues of Reinforcement-Based Self-Learning Fuzzy Control," Proceedings of the World Congress on Neural Networks (WCNN '93), (Portland, Oregon, July 1993).

Daughterity, W. C., "Characterizations of Fuzzy Operations," Proceedings of the Second International Workshop on Industrial Fuzzy Control & Intelligent Systems (College Station, Texas, December 1992), 234, 1992.

Yen, J., Wang, H. \*, and Daughterity, W. C., "Design Issues of a Reinforcement-Based Self-Learning Fuzzy Controller for Petrochemical Process Control," Proceedings of North American Fuzzy Information Processing Society (Puerto Vallarta, December 1992), 1992.

Yen, J., Wang, H. \*, and Daughterity, W. C., "An Adaptive Fuzzy Controller with Application to Petroleum Processing," Proceedings of IFAC Workshop on Intelligent Manufacturing Systems (Dearborn, October 1992), 1992.

Yen, J., Daughterity, W. C., and Rathakrishnan, B. \*, "Fuzzy Logic and Its Application to Process Control," Proceedings of CAPA Technology Conference (Houston, May 1992), 78-86, 1992.

\* Graduate Research Assistant I funded

Daughterity, W. C., Rathakrishnan, B. \*, and Yen, J., "Performance Evaluation of a Self-Tuning Fuzzy Controller," Proceedings of the IEEE International Conference on Fuzzy Systems (FUZZ-IEEE) (San Diego, March 1992), 1992.

Daughterity, W. C., "An Application of Geometrical Reasoning to a Combinatorial Problem," Proceedings of the Seventh Annual Conference on Applied Mathematics (Edmond, Oklahoma, April 1991), pp. 226-232, 1991.

Daughterity, W. C., Review of Data Communications Dictionary, by Charles J. Sippl, in Computing Reviews, Vol. 17, No. 9, pp. 335-336, 1976.

Daughterity, W. C., "Circuits for Dial-up and Local Use of a Stand-alone PDP-8," Proceedings of the Digital Equipment Computer Users Society, Vol. 2, No. 2 (Los Angeles, December 1975), pp. 413-414, 1976.

Daughterity, W. C., Review of Effective Use of ANS COBOL Computer Programming Language, by Laurence S. Cohn, in Computing Reviews, Vol. 16, No. 10, p. 441, 1975.

Manwell, T., Daughterity, W., Desch, S., and Stolurow, L., "Tom Swift and His Electric Bilingual Grandmother," ACM SIGCUE Bulletin, Vol. 7, No. 1, pp. 5-17, 1973.

Daughterity, W. C., "A Telephone Amplifier," Transactions of the Oklahoma Junior Academy of Science, Vol. IV, pp. 130-132, 1961.

\* Graduate Research Assistant I funded

## 2. Other Publications

Daughterity, W. C., "Honors Section," in Rabins, M. J., and Harris, C. E. Jr. (eds.), Engineering Ethics Teaching Manual, 1997.

Daughterity, W. C., "Honors Section," in Rabins, M. J., and Harris, C. E. Jr. (eds.), Engineering Ethics Teaching Manual, 1996.

Allen, G. D., Nelson, P., Jarvis, R. D., and Daughterity, W. C., "System Impact of Hit Assessment Capability for NPB Discrimination: Analysis of the Case of No-Hit Assessment," Weapons Lab/TALN Technical Report, Kirtland Air Force Base, May, 1990.

### 3. Other Conference Papers and Presentations

Coulson, R. N., and Daugherty, W. C., "A Knowledge Engineering Approach for Ecosystem Management," 11th Annual Landscape Ecology Symposium, International Association for Landscape Ecology - Integration of Cultural and Natural Ecosystems Across Landscapes: Applications of the Science, Galveston, Texas, 1996.

Coulson, R. N., and Daugherty, W. C., "Decision Support Systems for Forest Pests: Where Do All the Knowledge-Based Systems Go?", North American Forest Insect Work Conference, San Antonio, Texas, 1996.

Daugherty, W. C. and Coulson, R. N., SPBEBE (Economic and Environmental Impact Assessment for Southern Pine Beetle Suppression Projects), computer code, developed for the USDA Forest Service, Forest Health Protection, 1996-1997.

Coulson, R. N., and Daugherty, W. C., "Knowledge System Environment for Ecosystem Management," Global Studies Seminar, Battelle Pacific Northwest Laboratories, Richland, Washington, 1995.

Daugherty, W. C. and Coulson, R. N., ISPBEX-II (Integrated Southern Pine Beetle Expert System), computer code, developed for the USDA Forest Service, Forest Health Protection, 1994.

Daugherty, W. C., and Yen, J., "Tutorial on Neuro-Fuzzy Systems," Third International Workshop on Industrial Fuzzy Control & Intelligent Systems Houston, Texas, December 1993.

Daugherty, W. C., "Introduction to LISP with an On-line Demonstration," Houston Geotech '91, Houston, Texas, 1991.

Daugherty, W. C., "The Universal Classification Problem," South Central Regional Conference of the Association for Computing Machinery, Austin, Texas, 1984.

### 4. Research Projects

"Remote Laboratory Data Entry and Retrieval System," Texas Department of Agriculture, Walter C. Daugherty, 1986, \$3,000 (Daugherty 100%).

"Electrochemical Modeling of a Sinter Plate, Sealed Design Nickel-Cadmium (Ni-Cd) Battery Cell," National Aeronautics and Space Administration, Ralph E. White, Walter C. Daugherty, 1 graduate student, 1989, 25% of my salary 1989-90 (Daugherty 100%).

“Application of Reasoning under Uncertainty to Process Control,” Texaco, Walter C. Daugherty and John Yen, 1 graduate student; competitive and peer-reviewed, September 1990, \$18,000.

“Design of a Computational Classroom,” Texas A & M University, Walter C. Daugherty, September 1990-May 1991, \$60,000 (Daugherty 100%).

“Design of a Second Computational Classroom,” Texas A & M University, Walter C. Daugherty, January 1991-December 1992, \$153,000 (Daugherty 100%).

“Development of Honors Courses in Artificial Intelligence and Analysis of Algorithms,” Texas A & M University, Walter C. Daugherty, James Abello and Arkady Kanevsky, 2 graduate students, competitive, September 1991-May 1991, \$11,000 (Daugherty 50%).

“Integrated Southern Pine Beetle Expert System”; USDA Forest Service; Robert N. Coulson, Walter C. Daugherty, and Jeffrey W. Fitzgerald; 5 graduate students; competitive and peer-reviewed; 1985-1992, \$974,120.

“Distributed Data-Base Support for the ISPBEX Expert System”; USDA Forest Service; Robert N. Coulson, Walter C. Daugherty, and Jeffrey W. Fitzgerald; 1 graduate student; competitive and peer-reviewed; 1992-93; \$35,000.

“Integrated Southern Pine Beetle Expert System II”; USDA Forest Service; Robert N. Coulson, Walter C. Daugherty, and Jeffrey W. Fitzgerald; competitive and peer-reviewed; March 1993-February 1994; competitive and peer-reviewed; \$170,000.

“Ecological Modelling of Regional Responses to Global Changes: A Knowledge System Environment for Planning, Problem-Solving and Decision Making”; Battelle Pacific Northwest Laboratory; Robert N. Coulson and Walter C. Daugherty; competitive and peer-reviewed; June-December 1995; \$39,996.

“Fitness of a Genetically Modified *Gliocladium virens* in Soil and Rhizosphere”; USDA Cooperative State Research Service; Charles M. Kenerley and Walter C. Daugherty; 1 senior associate, 2 graduate students, and 1 undergraduate student; competitive and peer-reviewed; September 1996-August 2001; \$254,450 (Daugherty 50%).

“Southern Pine Beetle Biological Evaluation and Economic Evaluation Program Conversion”; USDA Forest Service, Forest Health Protection; Robert N. Coulson (PI) and Walter C. Daugherty (Co-PI); competitive and peer-reviewed; 1996-1997; \$16,421.

“The Texas Imported Fire Ant Survey: The Fire Ant Spatial Information Management System (FASIMS)”; Texas Agricultural Experiment Station; Robert N. Coulson (PI) and S. Bradleigh Vinson, Maria D. Guzman, Douglas F. Wunneburger, and Walter C. Daugherty (Co-PI’s); competitive and peer-reviewed; January 1998-December 1998; \$50,000.

“Special Topics in Computer Science Concepts and Programming”; Academy for Advanced Telecommunications and Learning Technologies; Walter C. Daugherty; competitive and peer-reviewed; June 1998-May 1999; \$5,000 (Daugherty 100%).

“Object Modeling Techniques Support for National Simulation Center Tactical Directorate”; U. S. Army through prime contractor Cubic Applications, Inc.; Walter C. Daugherty, James A. Wall, and José Salinas; competitive; September 1998-April 1999; \$74,498 (Daugherty 20%).

“The Fire Ant Spatial Information Management System (FASIMS)”; Texas Department of Agriculture, Texas Imported Fire Ant Research and Management Plan; Robert N. Coulson (PI) and Douglas F. Wunneburger, S. Bradleigh Vinson, and Walter C. Daugherty (Co-PI’s); competitive and peer-reviewed; 1999-2001; \$220,000.

“Evaluating the Impact of Southern Pine Beetle on Ecologically Sustainable Forest Management”; USDA Forest Service; Robert N. Coulson and Walter C. Daugherty; 1 graduate student and 1 undergraduate student; competitive and peer-reviewed; 2000-2003, \$90,000.

“Honey Bee Initiative”; State of Texas; Robert N. Coulson (PI), Walter C. Daugherty (Consultant); 2 graduate students; competitive; September 2001-August 2002; \$40,000.

“Increasing Computer Science Retention by Developing and Deploying Self-Paced Learning Modules”; State of Texas; Jennifer Welch and Frank Shipman (Co-PI’s), Lawrence Petersen, Walter C. Daugherty, and Lauren Cifuentes (Key Personnel); 10 undergraduate students; competitive; June 2002-August 2004; \$422,692.

“Facilitating the Transition to Java in High School Computer Programming Classes”; Texas A&M University System Academy for Educator Development;

Walter C. Daugherty; 1 graduate student; competitive and peer-reviewed; December 2003-September 2004; \$2,966 (Daugherty 100%).

“Instructional Technology Enhancements for Computer Teaching Labs,” Texas A&M University, Walter C. Daugherty, competitive, January 2004-August 2004, \$20,000 (Daugherty 100%).

“Increasing Computer Science Retention with Peer Teachers and Learning Modules”; State of Texas; Valerie Taylor and Jennifer Welch (Co-PI’s), Lawrence Petersen, Walter C. Daugherty, and Joseph Hurley (Key Personnel); undergraduate students; competitive; September 2004-August 2005; \$173,158.

Cumulative total: \$2,845,801

## 5. Research Proposals

Note: Funded proposals are listed in section 4 above.

“Automated Support for VLSI Standard Cell Optimization,” Texas Advanced Technology Program, Walter C. Daugherty, competitive and peer-reviewed, July 1989, not funded, \$233,887.

“Integration of Computer Software Models for NiCd Battery Design,” National Aeronautics and Space Administration, Ralph E. White and Walter C. Daugherty, competitive and peer-reviewed, 1990, not funded, \$125,000.

“Innovative Use of Supercomputers and Parallel Computers in Grades K-8,” Department of Energy, Paul Nelson, Walter C. Daugherty and Bahram Nassersharif, competitive and peer-reviewed, December 1990, preproposal submitted, \$885,000.

“Integration of Texas Junior Colleges into State and National Computer Networks,” Texas Advanced Technology Program, Walter C. Daugherty and Charles H. Beard, competitive and peer-reviewed, July 1991, not funded, \$174,219.

“Adaptive Fuzzy Control for Industrial Processes,” Texas Advanced Research Program, John Yen and Walter C. Daugherty, competitive and peer-reviewed, July 1991, not funded, \$177,064.

“Development of a Fuzzy Logic Tuner for a PID Controller,” Texaco, John Yen and Walter C. Daugherty, 1992-93, not funded, \$200,000.

“National Center For Ecological Analysis and Synthesis,” National Science Foundation; Robert N. Coulson, Walter C. Daugherty et al., competitive and peer-reviewed, July 1994, not funded, \$10,000,000.

“Development of a Fungal Growth Model for Risk Assessment,” Texas Advanced Research Program, Charles M. Kenerley and Walter C. Daugherty, competitive and peer-reviewed, July 1995, not funded, \$203,792.

“Intelligent Vehicle Navigation System,” Texas Advanced Technology Program, Walter C. Daugherty and Jeffrey W. Fitzgerald, competitive and peer-reviewed, July 1995, not funded, \$195,058.

“Innovative Programs to Increase the Enrollment in Computer Science,” Texas Technology Workforce Development Grant Program, Valerie Taylor and Frank Shipman (co-PI’s), Lawrence Petersen, Walter C. Daugherty, and Joseph Hurley (Key Personnel), competitive and peer-reviewed, March 2005, pending, \$69,760.

## 6. New Design Methods, Techniques, or Concepts Developed

### Null Modem

I independently invented the null modem in 1969 and constructed one for Harvard University (which is still operational!).

### Computer Keyboard National Standard

As a member of the Harvard-MIT Terminal Committee, I participated in the development of the national standard for computer keyboards (e.g., putting braces above brackets for the benefit of programming languages). Nearly every computer terminal and keyboard since then (e.g., VT100, PC) uses this layout.

### Integrated User Training

I invented the method of training users about additional features of an application program by integrating the information with the operation of the program (see Manwell, Daugherty, et al. under Publications, above). This is now widely adopted, e.g., by Microsoft for its Windows operating systems in the “Getting Started” panel.

### Object-Oriented Database

I independently invented and implemented an object-oriented database to support arbitrary combinations of data types.

### Self-Organizing Fuzzy Controller

In collaboration with Balaji Rathakrishnan (a Graduate Research Assistant I funded) and John Yen, I developed a new systematic methodology for constructing and tuning fuzzy logic controllers. The research project was funded by Texaco (see the preceding section for details) for use in its refineries.

## TEACHING

### 1. New Courses Developed

CPSC 111/211/311 Java and C-based sequence - Member of curriculum subcommittee, taught 111 and 211

CPSC 210 (Honors) - Data Structures

CPSC 320 (Honors) - Artificial Intelligence

CPSC 489 - Object-Oriented Programming, Systems, and Languages

CPSC 635 - Natural Language Processing (taught by Dr. P. Mayer)

CPSC 689 - Symbolic and Algebraic Computation (not taught)

CSCE 489/PHIL 382 (with Glen Miller [PHIL]) - Ethics and Cybertechnology

ENGR/PHIL 482 (Honors) - Ethics and Engineering

PHIL 282 (with Glen Miller [PHIL]) – Ethics in a Digital Age

PHYS/ELEN 674 (with David Church [PHYS]) - Special Topics in

Quantum Computing (the first course at Texas A&M in quantum computing, and, to the best of my knowledge, the first course in quantum computing anywhere in Texas), taught Spring, 2005, for the fifth time.

A Distance Learning section of CPSC 601 - Programming in C and Java, taught Spring, 2003.

Two sections of CPSC 111 - Computer Science Concepts and Programming taught with student peer teachers as assistants, Fall, 2002.

Honors section of CPSC 111 - Computer Science Concepts and Programming taught with student peer teachers as assistants, Fall, 2004.

Developed (with Lawrence Petersen) an intensive summer training program in Java and Software Engineering for high-school computer science teachers, taught Summer, 2003.

Developing an intensive summer training program in Data Structures for high-school computer science teachers, taught Summer, 2004; I was also completely responsible for recruiting teachers, getting them admitted, arranging for housing, and so on.

### 2. Courses Taught

#### A. Graduate

CPSC 601          Programming in C and Java

CPSC 602          Object-Oriented Programming, Development, and Software Engineering

CPSC 614          Computer

Architecture CPSC 625   Artificial

Intelligence CPSC 632 Expert  
 Systems  
 CPSC 681 Graduate Seminar  
 CPSC 685 Problems  
 CPSC 691 Research  
 PHYS/ELEN 674 Quantum Computing (co-teacher)

B. Undergraduate

CPSC 111 Computer Science Concepts and Programming  
 CPSC 111H Computer Science Concepts and Programming (Honors)  
 CPSC 120 Programming II  
 CPSC 120H Programming II (Honors)  
 CPSC 203 Introduction to Computing  
 CPSC 206 Structured Programming in C  
 CPSC 210 Data Structures  
 CPSC 210H Data Structures (Honors)  
 CPSC 211 Data Structures and Implementations  
 CPSC 211H Data Structures and Implementations (Honors)  
 CPSC 285 Special Topics - Data Structures for Teachers  
 CPSC 289 Special Topics - Java and Software Engineering for Teachers  
 CPSC 311 Analysis of Algorithms  
 CPSC 320/420 Artificial Intelligence  
 CPSC 320H/420H Artificial Intelligence (Honors)  
 CPSC 321 Computer Architecture  
 CPSC 464 Integrated Systems Design Automation  
 CPSC 485 Problems  
 CPSC/ELEN 485H Problems (Honors theses)  
 CPSC 489 Object-Oriented Programming, Systems, and Languages  
 CSCE 113 Intermediate Programming and Design  
 CSCE 121 Introduction to Program Design and Concepts  
 CSCE 121H Introduction to Program Design and Concepts (Honors)  
 CSCE 315 Programming Studio  
 CSCE 410 Operating Systems  
 CSCE 489 Cyberethics (co-teacher)  
 ENGR 112 Foundations of Engineering II  
 ENGR 112H Foundations of Engineering II (Honors)  
 ENGR/PHIL 482H Ethics and Engineering (Honors)

PROFESSIONAL OUTREACH

1. Director, Knowledge Systems Research Center
2. Invited Significant Seminars or Lectures

Daughterity, W. C., "Computers and Privacy," Phi Theta Kappa Honor Society State Convention, Blinn College, Brenham, Texas, 1985.

Daughterity, W. C., and DeSoi, J. F., "Objected-Oriented Programming," Second Annual Texaco Artificial Intelligence Symposium, Houston, Texas, 1989.

Daughterity, W. C., "A Self-Tuning Fuzzy Controller," ARRI Conference on Fuzzy Logic, Arlington, Texas, March 1992.

Daughterity, W. C., Yen, J., and Langari, R., "Tutorial on Fuzzy Logic," Second International Workshop on Industrial Fuzzy Control & Intelligent Systems, College Station, Texas, December 1992.

Daughterity, W.C., "A Partially Self-Training System for the Protein Folding Problem," World Congress on Neural Networks, Portland, Oregon, July 1993.

Daughterity, W.C., "Neuro-fuzzy Systems," Third International Workshop on Industrial Fuzzy Control & Intelligent Systems, Houston, Texas, December 1993.

Daughterity, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, College Station, Texas, Summer 1994.

Daughterity, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, Austin, Texas, Summer 1994.

Daughterity, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, College Station, Texas, Summer 1995.

Daughterity, W.C. and Harris, C.E., "Ethics and Engineering," NSF Research Experience for Undergraduates, Austin, Texas, Summer 1995.

Daughterity, W.C., "Public-Key Cryptography Meets Quantum Computing: Why Secret Agencies are Quaking in their Boots." Quantum Computing Seminar, Texas A&M University, April 9, 2001.

Daughterity, W.C., "Quantum Computing 101: How to Crack RSA." DefCon X, Las Vegas, NV, August 4, 2002.

Daugherty, W.C., "Computer Ethics." ENGR 482 Ethics and Engineering, Texas A&M University, April 14-16, 2003.

Daugherty, W.C., "Incorporating Computer Ethics into an Engineering Ethics Course." University of Texas Ethics Conference, Austin, Texas, April 16, 2004.

Daugherty, W.C., "Computer Ethics." ENGR 482 Ethics and Engineering, Texas A&M University, November 8-10, 2004.

Daugherty, W.C., "[My] 53 Years of Computing History," CSCE 681 Open Graduate Seminar, Texas A&M University, November 18, 2015.

### 3. Consulting

St. Joseph's Hospital, Bryan, Fall 1990, at no charge.

Other clients include IBM Federal Systems Division, New York Times, Washington Post, Los Angeles Times, Cheyenne and Arapaho Tribes of Oklahoma, Southwestern Bell Telephone, Fulbright & Jaworski (Houston), Texas Department of Agriculture, Phonogram B.V. (Amsterdam), and U. S. Department of the Treasury.

### HONORS AND AWARDS

Oklahoma Junior Academy of Science, elected to membership, 1961,  
Oklahoma State University  
National Science Foundation, Institute for High Ability Secondary  
School Students, 1962, University of Oklahoma  
Westinghouse, Science Talent Search national finalist,  
1963 National Merit Scholarship test, highest score in  
Oklahoma, 1963 Frontiers of Science, scholarship, 1963,  
Oklahoma City, Oklahoma  
Engineering Club of Oklahoma City, award, 1963, Oklahoma City,  
Oklahoma Oklahoma Christian College, full scholarship (top  
entering freshman), 1963,  
Oklahoma City, Oklahoma  
National Science Foundation, Undergraduate Research Participation  
Program, 1965, University of Oklahoma, Norman, Oklahoma  
Alpha Delta Tau, National Honor Society, 1966  
Who's Who in American Colleges and  
Universities, 1966 Graduate Record Exam in

Mathematics, scored 800, 1966 Harvard University, Prize Fellowship, 1966 National Science Foundation, Academic Year Institute, 1967 Phi Delta Kappa, National Honor Society, 1967  
Harvard University, Class Marshal for the Graduate School of Education, 1967 Harvard University, Bowdoin Prize, bronze medal and cash award for outstanding writing, 1973  
Association for Computing Machinery, selected as a reviewer for Computing Reviews, 1975  
Association for Computing Machinery, Outstanding Regional Intercollegiate Programming Contest Director Award, 1993, Indianapolis, Indiana  
World Congress on Neural Networks, Neural Systems Session Co-chair, 1993, Portland, Oregon  
Graduate Student Council, 1997 Outstanding Graduate Faculty Award citation: "For your time and dedication to graduate students at Texas A&M."  
Named by the TAMU System to The Academy for Educator Development, a major component of The Texas A&M University System's Regents' Initiative for Excellence in Education, 2003 (one of only two faculty members selected from the entire College of Engineering).  
Winner, \$500 cash prize, Texas A&M University Academic Integrity Week Essay Competition (Faculty Category), 2004.  
Texas A&M University, Department of Computer Science & Engineering, 2009 Undergraduate Faculty Award citation: "In grateful appreciation of dedicated service, exemplary attitude, and significant contribution."  
Qualified for American MENSA, 2015.  
Oklahoma Christian University, Department of Mathematics and Computer Science, 2015  
Distinguished Alumnus Award citation: "For outstanding vision, dedication, and commitment to excellence."