Instructors

Dr. Jack Rodney Grisham

Education

Ph.D. Mathematical Sciences, Rice University, 1977

M.A. Mathematical Sciences, Rice University, 1975

Rice Graduate Fellow, 1972-76

B.S. Mathematics, University of Oklahoma, 1968

Phi Beta Kappa, 1968

Experience

Summary

Instructor of Mathematics, stressing skills critical to today's commercial environments. Leader of software and hardware design and development projects, stressing teamwork. Over 20 years engineering experience specializing in strategic planning, marketing, project management, development, and support. Skilled at evaluating user requirements, assessing development tools and technologies, and merging these to create functional specifications and products which meet customer needs. Excellent communication and interpersonal skills.

Professional Experience

2014- Adjunct Professor of Mathematics

Instructor of applied mathematics courses, including linear algebra and statistics, to students in engineering degree programs at the University of Texas at Tyler, Houston Engineering Center.

2014- Adjunct Professor of Mathematics

Instructor of algebra, finite mathematics, and calculus to students in various degree programs at Houston Community College.

2010-11 Visiting Professor of Mathematics

Professor at Prairie View A&M University of trigonometry, calculus, differential equations, discrete mathematics, numerical analysis, and other courses as requested for students in various degree programs. Responsibilities included insuring that all instructors of College Algebra, Algebra-Trigonometry, and Trigonometry complied with the Math Department's guidelines for course content and that examinations verified that students mastered the learning objectives. Constructed the department wide mid-term and final examinations.

2011-14 Adjunct Professor of Mathematics

Instructor of algebra, finite mathematics, statistics, trigonometry, pre-calculus, and calculus to students in various degree programs at Wharton County Junior College.

2008-10 Adjunct Professor of Mathematics

Instructor of algebra and finite mathematics to students in various degree programs at Houston Baptist University.

2005- Adjunct Professor of Mathematics

Instructor of algebra, finite mathematics, statistics, trigonometry, pre-calculus, calculus, and differential equations to students in various degree programs at Lone Star College-CyFair.

2004-05 Lead Faculty Area Chair, Mathematics

Assisted with the evaluation and selection of new faculty members for the University of Phoenix, Houston. Mentor to new mathematics faculty members, providing advice and guidance in the teaching of mathematics to the university's unique student population. Evaluated existing mathematics faculty members as part of the university's Academic Quality Assurance Program.

2003-14 Adjunct Professor of Mathematics

Instructor of college algebra and finite mathematics to students in various degree programs at the University of Phoenix, Houston Campus.

2000- President, Revex Technologies
1998-00 President, RevTech Industries

Corporate administration and marketing of the patented Revex™ Units for chemical mass transfer in gas-liquid processes. Worked with existing and potential licensees on applications of the units and on design for complete systems incorporating the units.

1997-98 Consultant and Investor, RevTech Industries

Provided marketing and strategic planning services. Assisted in creating VAR and OEM agreements for resellers. Advised on computing facility requirements. Assisted with the development of the theory of operation of the Revex™ system and with research for product extensions.

1990- President and Principal Consultant, Technix Systems

Founded Technix Systems to provide computer based solutions for the petroleum industry. Technix specializes in consulting services in the areas of requirements definition, system functional specification, product definition and marketing, and software design and implementation for exploration, production, and pipeline engineering systems. Provided marketing services for independent software vendors. Development projects include integration of a stratigraphic analysis system with the Landmark/Halliburton exploration system, real-time leak detection systems for products pipelines, hydrocarbon phase behavior analysis system, performance and portability analysis

of a comprehensive exploration system, and an engineering document management system.

1992-94 Project Leader, Petrotechnical Open Software Corporation

Responsible for the project to standardize user interfaces for petroleum exploration and production engineering software systems, most of which are graphical and have a high degree of user interactivity. Project goals were to reduce the costs of developing and deploying engineering applications and to increase the productivity of end users through standardization of presentation and interaction methodologies. Published the E&P User Interface Style Guide. Lead the effort to define and standardize the architecture and behavior of user interfaces for distributed applications. Responsible for personnel assigned to the project within POSC, Houston and London. Coordinated the efforts all the personnel who were assigned to the POSC project by their respective companies. The participation was worldwide and included operating oil companies and software system vendors.

Additional responsibilities were to evaluate emerging open system technology and to plan for the future in a way that would minimize migration costs while taking advantage of existing graphical tools. Represented POSC at the Open Software Foundation (End User Steering Committee and UEC Technical SIG) and the X Consortium (Advisory Committee and working groups) and also closely monitored the work of the Object Management Group. An active proponent of graphical extensions to OSF/Motif and projects at the X Consortium, which was developing distributed object technology for graphical user interfaces.

1989-90 Director, Strategic Planning, ChemShare

Responsible for strategic planning for an engineering information management system and related products. For each type of potential client company, analyzed the functional requirements, the engineering benefits, and the financial incentives. Estimated development costs and potential revenues of each product. Evaluated and selected hardware and software for integrated subsystems and for software development and management tools.

1988-89 Director, DesignMaster Systems, ChemShare

Product manager for DesignMaster, a chemical process design and plant design software system. Technical expertise required for this product included engineering database, CAD-type graphics, windows based user interface, and data interchange between various engineering analysis and design software products. Supervised all staff members assigned to the division, including software research and development, software maintenance, and customer support personnel.

1983-88 Director of Microcomputer Applications, J. S. Nolen and Associates

Directed the development of an interactive, graphics oriented, software system to support petroleum reservoir engineering activities. Personal contributions included product conception, market analysis, functional specification, selection of computer hardware, specification of software development tools, acquisition of certain software components, placement of beta-test systems, and initial product marketing. Responsible for hiring, training, and coordination of the members of the project staff.

Directed the development of a computer-based system for the collection and analysis of data from

laboratory pressure-volume-temperature experiments conducted on crude oils. Developed models of three phase PVT behavior of steam/water and hydrocarbon systems for use in thermal reservoir simulators.

1979-83 General Manager for Reservoir Development, Intercomp Resource Development and Engineering

Responsible for personnel, budget, planning, and operation of the Reservoir Section of the Research and Development Division. Directed the development of reservoir simulation software, utilizing staff members in Houston, Calgary, and London offices. Coordinated marketing support and customer support activities for reservoir simulation software.

1978-79 Senior Reservoir Engineer, Intercomp Resource Development and Engineering

Responsible for enhancement, maintenance, and customer support for black-oil and chemical flooding reservoir simulators.

1976-78 Research Mathematician, Exxon Production Research

Designed and developed an inverse simulation procedure for calculating oil relative permeability from laboratory core flood data. Enhanced Exxon's black-oil reservoir simulator.

1969-72 Lieutenant JG, U.S. Navy

While stationed at the National Security Agency, participated in the design and development of a computer controlled, Fourier analysis processor. Performed research in the areas of scarce resource allocation problems, radio direction finding techniques, and modeling of high frequency radio propagation. As Electronics Maintenance Officer for a Naval Security Group Activity in Germany, responsibilities included planning the maintenance of communications and electronic intelligence equipment and enhancement of radar signal analysis software. Responsible for personnel assigned to operate the equipment on a 24 hour per day, 7 day a week schedule.

1968 Program Analyst, Western Geophysical

Implemented inverse digital filtering techniques and participated in developing methods for calculating surface weathering corrections for seismic signals.

Publications

Grisham, J. R. and Mac McMillan. *"CGM*PIP/III - Hardcopy for the E&P Industry," TechnoPOSC*, July 1995.

Grisham, J. R. and Mac McMillan. *"A Graphics Data Model for the E&P Industry," TechnoPOSC*, July 1995.

Grisham, J. R. and C. C. Purdy. *"Why Software Standards Benefit the Log Analyst," The 35th Annual Logging Symposium Transactions,* Society of Professional Well Log Analysts, June 1994.

Grisham, J. R. and POSC Style Guide Work Group. *E&P User Interface Style Guide*, Prentice-Hall,

Englewood Cliffs, New Jersey, 1993.

Chien, M. C. H. and J. R. Grisham. *"An Interactive Graphics and Menu Driven Fluid Phase Behavior Calculation Package," Proceedings of the Chinese Petroleum and Petrochemical Technology Symposium,* May 1991.

Grisham, J. R. and J. R. Wallis. *"Petroleum Reservoir Simulation on the CRAY-1 and on the FPS-164," Proceedings of the Tenth IMACS World Congress on System Simulation and Scientific Computation,* Montreal, Canada, August 1982.

Grisham, J. R. *An Inverse Simulation Approach for Calculating the Oil Relative Permeability of Core Samples,* Exxon Company Report, 1978.

Grisham, J. R. An Interior Penalty H^1-Galerkin Procedure for the Numerical Solution of Elliptic Partial Differential Equations, Ph.D. Dissertation, Rice University, 1977.

Grisham, J. R. and J. R. Thompson. *"The Use of B-splines in the Estimation of Power Spectra," Proceedings of the Fifth Symposium on Nonlinear Estimation Theory and its Applications,* San Diego, September 1974.