

## Reviewer Acknowledgements

We at the *MIS Quarterly* would like to thank the many excellent reviewers who have volunteered their time and expertise to make this an outstanding journal in the field. Their dedication has allowed us to bring you quality articles in a timely manner.

James H. Adlar  
Assistant Professor  
Bentley College  
Waltham, MA

Robert B. Adams  
Director, Information Systems  
Buckeye Pipe Line Co.  
Emmaus, PA

Maryam Alavi  
Assistant Professor  
University of Houston  
Houston, TX

Corbett L. Alley  
Vice President  
St. Josephs Hospital and Medical Center  
Phoenix, AZ

Robert M. Allowy  
Professor  
Lexington, MA

James F. Anderson, Jr.  
Consulting Manager  
Arthur Andersen and Company  
Minneapolis, MN

Gad Ariav  
Assistant Professor  
New York University  
New York, NY

James Bailey  
Associate Professor  
Arizona State University  
Tempe, AZ

Leslie D. Ball  
Professor of Information Systems  
Babson College  
Wellesley, MA

Martin Barliff  
Associate Professor  
Illinois Institute of Technology  
Chicago, IL

Robert Barrett  
Associate Dean  
Indiana-Purdue University  
Fort Wayne, IN

William Bearley  
Associate Professor  
University of LaVerne  
LaVerne, CA

Jack D. Becker  
Assistant Professor  
University of Missouri  
St. Louis, MO

Jesse L. Bemley, Ph.D.  
Computer Specialist  
Drug Enforcement Administration  
Washington, DC

Michael C. Berstene  
151 Farmington Avenue  
Hartford, CT

Craig Bickel  
Database Manager  
Economics Laboratory, Inc.  
St. Paul, MN

Fred L. Bierly  
Computer Science Coordinator  
Penn State University  
University Park, PA

P.D. Birkhahn  
President  
Birkhahn Associates  
Weston, CT

John T. Bollinger  
Group Director, DP  
IMS America, Limited  
Ambler, PA

J.L. Boockholdt  
Associate Professor  
University of Houston  
Houston, TX

A. Faye Borthick  
Assistant Professor  
The University of Tennessee  
Knoxville, TN

Andrew Boynton  
University of North Carolina  
Chapel Hill, NC

George Brabb  
Professor  
Illinois State University  
Normal, IL

Warren G. Briggs  
Professor  
Suffolk University  
Boston, MA

George Brophy  
Vice President  
Connecticut National Bank  
Hartford, CT

Thomas Browdy  
Assistant Director  
Washington University  
St. Louis, MO

Robert Browne  
Con Edison  
New York, NY

Donald Burkhard  
Assistant Professor  
University of Virginia  
Charlottesville, VA

Lee T. Cahill  
Manager, HRMIS  
International Paper Co.  
New York, NY

Terry L. Campbell  
Pennsylvania State University  
University Park, PA

Richard Carpenter  
Vice President  
Index System  
Cambridge, MA

Norman Carter  
Studio City, CA

William Cats-Baril  
Assistant Professor  
University of Vermont  
Burlington, VT

Jean Chastain  
Information Center Manager  
Economics Lab  
St. Paul, MN

Arthur E. Chester  
Ailing & Cory  
Rochester, NY

W. Jeff Clark  
Professor  
Western Kentucky University  
Bowling Green, KY

Thomas Clark, Jr.  
Associate Professor  
Florida State University  
Tallahassee, FL

K. Bradford Claypool  
MIS Analyst  
Sisters of Providence  
Seattle, WA

Barnet C. Corwin  
Vice President, Corporate Systems  
Ten Stamford Forum  
Stamford, CT

Peter M. Crowell  
Director of Corporate I.S.  
Josephson International Inc.  
New York, NY

Bruce G. Curry VP MSS Hertz New York, NY	Harry F. Downing, Jr. Director of Data Processing Nationwide Insurance Company Columbus, OH	Don Fogarty Professor of MS Southern Illinois University Edwardsville, IL
John Dacey President Dacey & Associates Cambridge, MA	Uldarico Rex Dumdum, Jr. Lecturer State University of New York Binghamton, NY	Karen Forcht Assistant Professor James Madison University Harrisonburg, VA
M.A. Daniels North Babylon, NY	Russell W. Dych Manager Project Management Scott Paper Company Philadelphia, PA	Ken Fordyce IBM Poughkeepsie, NY
Raymond Dash Sr. Vice President Benefit Trust Life Insurance Chicago, IL	Charlene Dykman President Integrated Systems Implementation Specialists Houston, TX	Fred Forman Vice President American Management Systems, Inc. Arlington, VA
Bernard David President General Information Services, Inc. Bala Cynwyd, PA	C. Robert Eckman Systems Consultant International Playtex, Inc. Dover, DE	Charles R. Franz Assistant Professor University of Missouri-Columbia Columbia, MO
Charles Davis Manager Deloitte Haskins & Sells Houston, TX	Omar El Sawy Assistant Professor University of Southern California Los Angeles, CA	Charles Friday Assistant Director, EDP NYS OGS Computer Center Albany, NY
Donald L. Davis Associate Professor of MIS University of Mississippi University, MS	Lance B. Elliot Professor Long Beach, CA	William L. Fuerst Price Waterhouse Dallas, TX
Sylvia T. De Jesus Manager, Corp. Systems Development Morton Thiokol, Inc. Chicago, IL	Pierce Ennessy President Computer Security Group Highland Park, IL	Dennis Galletta Instructor University of Pittsburgh Pittsburgh, PA
William H. DeLone American University Kogod College of Business Administration Washington, DC	Leigh Estabrook University of Illinois Urbana, IL	Ron Gehler Senior Business Systems Consultant Farm Credit Services St. Paul, MN
Charles D. Decker Decision Support Manager GTE Data Services Tampa, FL	Thomas F. Farrell Information Systems Manager Getty Oil Company Tulsa, OK	Ulric J. Gelinas, Jr. Assistant Professor Bentley College Waltham, MA
Mark Derr Director, MIS System Development Corporation McLean, VA	Paul H. Farseth Senior Systems Analyst Minnesota Department of Welfare St. Paul, MN	Harry L. Gibson Professor Colorado State University Fort Collins, CO
A. Dexter Associate Professor University of British Columbia Vancouver, British Columbia Canada V6T 1Y8	Norman Fastenberg SVP Swiss Reinsurance New York, NY	Michael Gibson Assistant Professor North Texas State University Denton, TX
V. Thomas Dock 4310 L. Honmoapiilani Highway Maui, HI	Jane Fedorowicz Associate Professor Boston University Boston, MA	Virginia Gibson Assistant Professor University of Maine Orono, ME
William J. Doll Associate Professor Memphis State University Memphis, TN	Thomas W. Ferratt University of Dayton Dayton, OH	Michael J. Ginzberg Associate Professor Case Western Reserve University Cleveland, OH
Alan F. Dowling, Jr. Assistant Professor Case Western Reserve University Cleveland, OH	James Flenniken Director, Information Systems Cooperweld Corporation Pittsburgh, PA	John P. Glaser Arthur D. Little Cambridge, MA

John Gochenouer  
Assistant Professor  
Miami, FL

John Golden, Jr.  
Director of Administration  
Honeywell  
Wilmington, MA

John T. Gorgone  
Professor and Chair  
Bentley College  
Waltham, MA

Paul Gray  
Professor  
Claremont Graduate School  
Claremont, CA

Lee Gremillion  
Associate Professor  
Boston University  
Boston, MA

Tor Gulmaras  
Assistant Professor  
Case Western Reserve University  
Cleveland, OH

Sanford Guynup  
Computer Systems Manager  
Science Press  
Ephrata, PA

R. Terry Haas  
Manager  
Air Products and Chemicals  
Allentown, PA

Richard D. Hackathorn  
Associate Professor  
University of Colorado at Denver  
Denver, CO

Maurice Halladay  
Assistant Professor  
Suffolk University  
Boston, MA

Jay R. Hamann  
Vice President, MIS  
Schreiber Foods, Incorporated  
Green Bay, WI

Scott Hamilton  
Product Manager  
MFG Software Corporation  
Eagan, MN

William Harrison  
Associate Professor  
Oregon State University  
Corvallis, OR

Curt Hartog  
Assistant Director  
Washington University  
St. Louis, MO

Stewart Hazelton  
Carlisle, MA

Jim Highsmith  
President  
Information Architects, Inc.  
Atlanta, GA

Stephen Hiller  
Vice President  
Leviton Manufacturing Company  
Little Neck, NY

Jack T. Hogue  
Assistant Professor  
University of North Carolina-Charlotte  
Charlotte, NC

Charles H. Hoke  
Professor  
Southeastern University  
Washington, DC

Steven Holland  
President  
AID  
Oak Brook, IL

Joan E. Hoopes  
Lecturer  
State University of NY  
Binghamton, NY

William House  
Professor  
University of Arkansas  
Fayetteville, AR

Bob Howe  
Vice President  
Booz, Allen & Hamilton  
Cleveland OH,

Floyd Jamison  
Northbrook, IL

M.V. Janulaitis  
President  
Los Angeles, CA

Matthias Jarke  
Assistant Professor  
New York University  
New York, NY

Paul Johnson  
Professor  
University of Minnesota  
Minneapolis, MN

Louise Jones  
Director CISMER  
University of Delaware  
Newark, DE

Phillip A. Jones, Sr.  
Associate Professor of Accounting  
E.C. Robins School of Business  
Richmond, VA

Hugh F. Juergens  
North Oaks, MN

Kate Kaiser  
Assistant Professor  
University of Wisconsin-Milwaukee  
Milwaukee, WI

Kirk R. Karwan  
Assistant Professor  
Duke University  
Durham, NC

George M. Kasper  
Assistant Professor  
Texas Tech University  
Lubbock, TX

Kenneth R. Kasprzak  
Manager, MIS Control  
Owens-Corning Fiberglas  
Toledo, OH

David Katch  
Atherton, CA

Adolph Katz  
Associate Professor  
Fairfield University  
Fairfield, CT

G.W. Keever  
Assistant Director for Systems Development  
ICI Americas Incorporation  
Wilmington, DE

Julie Kendall  
Assistant Professor  
George Mason University  
Fairfax, VA

Kenneth E. Kendall  
Associate Professor  
George Mason University  
Fairfax, VA

Steven O. Kimbrough  
Assistant Professor  
University of Pennsylvania  
Philadelphia, PA

James R. King  
Assistant Professor  
Baylor University  
Waco, TX

James R. Kinney  
Director of Information Services  
General Foods Corporation  
White Plains, NY

Theodore Klein  
President  
Boston Systems Group  
Boston, MA

Kenneth A. Kozar  
University of Colorado  
Boulder, CO

Kenneth L. Kraemer  
Director  
University of California  
Irvine, CA

**James M. Kraushaar**  
Associate Professor  
University of Vermont  
Burlington, VT

**Robert Landenberg**  
Manager  
ISC Technologies, Inc.  
Lancaster, PA

**George C. Langston**  
Chairman  
Forstmann & Company, Inc.  
Dublin, GA

**Lawrence Laning**  
Cincinnati, OH

**L.J. Lavigne, Jr.**  
Controller  
Genentech  
South San Francisco, CA

**John D. Lees**  
Associate Professor  
California State University  
Chico, CA

**Harry Leopold**  
Manager  
Kemper Insurance Group  
Long Grove, IL

**Nanette Levinson**  
Associate Professor and Director  
The American University  
Bethesda, MD

**Henry A. Lewis**  
Director  
Soft Solutions  
Wayzata, MN

**L. Floyd Lewis, II**  
Assistant Professor  
Western Washington University  
Bellingham, WA

**Eldon Y. Li**  
Associate Professor  
California Polytechnic State University  
San Luis Obispo, CA

**Chuck Litecky**  
Associate Professor  
University of Missouri  
Columbia, MO

**Mary E.S. Loomis**  
Vice President  
D. Appleton Company, Inc.  
Tucson, AZ

**John Lowdon**  
Manager, System Support Services  
Computing Consortium  
Redmond, WA

**Phillip Lukaszak**  
Orland Park, IL

**Samuel A. Lynch**  
Moraga, CA

**Norman Lyons**  
Associate Professor  
Naval Postgraduate School  
Monterey, CA

**Mo A. Mahmood**  
Assistant Professor  
University of Missouri-St. Louis  
St. Louis, MO

**John C. Malley**  
Assistant Professor  
University of Mississippi  
University, MS

**Edward A. Maltese**  
Manager  
Schering-Plough Corporation  
Madison, NJ

**Robert I. Mann**  
Assistant Professor  
The University of Georgia  
Athens, GA

**Donald A. Marchand**  
Director  
University of South Carolina  
Columbia, SC

**E. Nancy Markle**  
VP, Information Services  
Federal National Mortgage Association  
Washington, DC

**M. Lynne Markus**  
Assistant Professor  
The University of California-Los Angeles  
Los Angeles, CA

**Roy Marsten**  
Professor  
University of Arizona  
Tucson, AZ

**Thomas Martinetto**  
Pittsburgh, PA

**Thomas Martinson**  
Assistant Vice President  
Cigna Corporation  
Philadelphia, PA

**Robert Mathers**  
Information Systems Auditor  
St. Paul, MN

**Carl McDevitt**  
Chairman  
Auburn University  
Montgomery, AL

**Scott McGill**  
Director of Data Processing  
City of Colorado Springs  
Colorado Springs, CO

**Gregory McHugh**  
Director  
Four Phase/Motorola  
Cupertino, CA

**J.L. McKenney**  
Professor  
Harvard Business School  
Boston, MA

**Patrick J. Mellett**  
Vice President  
Oppenheimer & Co., Inc.  
New York, NY

**Roger Merrill**  
Manager, Systems Development  
IDS  
Minneapolis, MN

**Alan G. Merten**  
Professor  
The University of Michigan  
Ann Arbor, MI

**Donald G. Miller**  
Vice President  
The First National Bank of Chicago  
Chicago, IL

**Theodore J. Mock**  
Professor  
University of Southern California  
Los Angeles, CA

**Juan P. Monterroso**  
Applications Center Manager  
Hewlett Packard  
Palo Alto, CA

**Dennis R. Morga**  
MIS Project Manager  
Union 76 Western Region  
Los Angeles, CA

**David Morgan**  
Director  
City of Dallas  
Dallas, TX

**Paul M. Morris**  
Assistant Professor  
Northeastern University  
Boston, MA

**Joanna D. Mulholland**  
Assistant Professor  
Philadelphia College of Textiles and Science  
Philadelphia, PA

**H. Albert Napier**  
Professor  
Rice University  
Houston, TX

**Jerry Newhouse**  
Director  
Mead Johnson & Company  
Evansville, IN

**Fred Newpeck**  
Project Manager, Information Systems  
Jewel Food Stores  
Melrose Park, IL

**Paul Nutt**  
Professor  
Columbus, OH

Charles Paddock  
Assistant Professor  
Arizona State University  
Tempe, AZ

Andrew Palkovitz  
Director, Information Systems Planning  
American Express Company  
New York, NY

Paul Paschke  
Associate Professor  
Oregon State University  
Corvallis, OR

Bruce M. Plepho  
Systems Consultant  
Woodbury, MN

Anthony Pizzelanti  
Vice President  
MacMillan Inc.  
New York, NY

Joseph Podolsky  
Information Systems Manager  
Hewlett Packard  
Palo Alto, CA

Kenneth A. Popp  
Product Manager ATP  
Boeing Computer Services  
Renton, WA

William E. Pracht  
Assistant Professor  
Texas Tech University  
Lubbock, TX

Robert H. Pry  
Vice Chairman, Technology  
Gould Inc.  
Rolling Meadows, IL

Raul Pupo  
National Steel Corporation  
Pittsburgh, PA

Philip Pyburn  
Professor  
University of South Florida  
Tampa, FL

Judith Quillard  
Associate Director  
Massachusetts Institute of Technology  
Cambridge, MA

Robert A. Rademacher  
Chairman/Professor  
Colorado State University  
Ft. Collins, CO

Eugene J. Rathswohl  
Assistant Professor  
University of San Diego  
San Diego, CAL

Chuck Reichert  
Mgr., Membership/Financial Systems  
Kirke-Van Orsdel, Inc.  
Des Moines, IA

Robert B. Rider  
Director, Information Systems  
Sun Chemical Corporation  
Fort Lee, JN

Robert S. Roberts  
Assistant Professor  
University of Oklahoma  
Norman, OK

John F. Rockart  
Director, CISR  
Sloan School of Management, MIT  
Cambridge, MA

Kathleen Rockwell  
Salt Lake City, UT

Joseph P. Rodgers  
Dean  
University of Dallas  
Irving, TX

Gary Roodman  
Professor  
S.U.N.Y.  
Binghamton, NY

John J. Rooney  
Professor  
Monrovia, MD

Anthony J. Rotondi  
Vice President, Systems  
Western Life Insurance Company  
Woodbury, MN

Robert A. Rouse  
Associate Director  
Washington University  
St. Louis, MO

Alan J. Rowe  
Professor  
University of Southern California  
Los Angeles, CA

C.S. Sankar  
AT&T Bell Laboratories  
Holmdel, NJ

Satya P. Saraswat  
Associate Professor  
San Diego State University  
San Diego, CA

Richard Scamell  
Associate Professor  
University of Houston  
Houston, TX

George P. Schell  
Assistant Professor  
University of Tulsa  
Tulsa, OK

Roger Schelm  
Vice President  
CIGNA Systems  
Philadelphia, PA

Rob Schlegel  
McGladrey, Hendrickson & Pullen  
Indianapolis, IN

John F. Schrage  
Associate Professor  
Southern Illinois University  
Edwardsville, IL

George M. Scott  
Head, Dept. of Information Management  
University of Connecticut  
Storrs, CT

Gerald D. Scott  
Vice President  
Lionel Leisure, Inc.  
Philadelphia, PA

Richard A. Scudder  
Assistant Professor  
University of Denver  
Denver, CO

John P. Seagle  
Associate Professor  
State University of New York  
Albany, NY

Arun Sen  
Assistant Professor  
State University of New York  
Albany, NY

D.H. Shaffer  
Director, Management Information  
Canteen Corporation  
Chicago, IL

Peter B. Shannon  
Dallas, TX

Ashok Shenolikar  
Grumman Data Systems Corporation  
Woodbury, NY

Ronald Short  
Sperry Corporation  
Roseville, MN

Paul Shrivastava  
Assistant Professor  
New York University  
New York, NY

Don Shump  
Manager of Project Management  
Scott Paper Company  
Philadelphia, PA

Val Silbey  
Florida International University  
Miami, FL

Peter A. Silhan  
Assistant Professor  
Champaign, IL

Alvin Silver  
Partner  
A. Silver Associates  
East Northport, NY

Brandon Simpson  
Riverside, CA

Sumit Sircar  
Associate Professor  
University of Texas at Arlington  
Arlington, TX

Laird K. Smith  
Manager, Management Information Services  
Stromberg-Carlson  
Orlando, FL

Gerald L. Smith  
Director  
Computer Science Corporation  
Falls Church, VA

Harry R. Smith  
President  
Ethno-Cyternetic Systems Inc.  
Bozeman, MT

Stanley J. Smits  
Professor  
Georgia State University  
Atlanta, GA

Charles A. Snyder  
Associate Professor  
Auburn University  
Auburn, AL

Dr. Sezer Soylemez  
Vice President, MIS  
Scientific-Atlanta  
Atlanta, GA

J. Wayne Spence  
Doctor  
North Texas State University  
Denton, TX

Richard Sprague  
Consultant  
Collage Grove, MN

Norman Statland  
National EDP Director  
Price Waterhouse  
New York, NY

Blair Y. Stephenson  
Visiting Professor  
University of Dallas  
Irving, TX

Edward Tamm  
Director  
Cetus Corporation  
Emeryville, CA

James Teng  
Assistant Professor  
University of Pittsburgh  
Pittsburgh, PA

Kenneth Thompson  
San Antonio, TX

Michael Thorsen  
Wayzata, MN

Michael Treacy  
Sloan School of Management, MIT  
Cambridge, MA

Robert H. Trent  
Professor of Commerce  
University of Virginia  
Charlottesville, VA

Jon A. Turner  
Associate Professor  
New York University  
New York, NY

Pat Tyrell-Smith  
Business Computing Consultant  
Aegis Information Systems, Inc.  
Honolulu, HI

W.A. Ullrich  
Manager, IM Strategic Planning  
GTE  
Stamford, CT

Morris H. Upper, Jr.  
Lindon, UT

John Valuser  
Assistant Professor of Operations Research  
AFIT/ENS  
Wright Patterson AFB, OH

M.T. Venecek  
Associate Professor  
North Texas State University  
Denton, TX

Robert Vazsonyi  
Manager  
NCR Systemedia  
Miamisburg, OH

B. Vijayalakshmi  
Assistant Professor  
University of Connecticut  
Stores, CT

Nicholas Vitalari  
Assistant Professor  
University of California  
Irvine, CA

Doug Vogel  
Assistant Professor  
University of Arizona  
Tucson, AZ

Myles A. Vogel  
Becton Dickinson  
Cockeysville, MD

Paul E. Vogelsang  
Partner  
Arthur Andersen & Co.  
Milwaukee, WI

Philip C. Wade  
Project Manager  
Merrill Lynch  
White Plains, NY

Caroline Wardle  
Associate Professor  
Boston University  
Boston, MA

Paul R. Watkins  
Assistant Professor  
University of Southern California  
Los Angeles, CA

Hugh Watson  
Director of MIS programs  
University of Georgia  
Athens, GA

Ralph Waugh  
Manager, Division Strategy Integration  
Texas Instruments  
Temple, TX

Melvyn Weisel  
Associate Professor  
Pace University  
New York, NY

Bernard P. Wess, Jr.  
President  
Information Architects, Inc.  
Needham Heights, MA

Michael West  
Data Administrator  
John Hancock  
Boston, MA

Clint White  
Assistant Professor  
Penn State University  
University Park, PA

Joseph Williams  
Assistant Professor  
New Mexico State University  
Las Cruces, NM

W.B. Williams  
VP, MIS  
ILC Data Device Corp.  
Bohemia, NY

Lance Wilson  
Director, Foods International  
Land O'Lakes  
Minneapolis, MN

Peter Wilson  
Director of Quality Assurance  
Applied Information Development  
Oak Brook, IL

John C. Windsor  
Assistant Professor  
North Texas State University  
Denton, TX

Lawrence F. Young  
Associate Professor  
Drexel University  
Philadelphia, PA

Anthony Ziemba  
Director  
Competitive Strategies  
Hudson, NY

Richard Zultner  
President  
Zultner & Company, Inc.  
Princeton, NJ

## **Proofreader Acknowledgements**

The following Ph.D. students have provided considerable assistance in consulting and proofreading prior to publication. We would like to thank them for their dedicated service.

Keith Bellaires  
University of Minnesota

Jim Brancheau  
Research Coordinator  
MIS Research Center  
University of Minnesota

D.J. McBride  
University of Minnesota

Ann Morey  
University of Minnesota

Craig Roger  
Research Assistant  
MIS Research Center  
University of Minnesota

Richard Watson  
University of Minnesota

Ilze Zigurs  
University of Minnesota