# Curriculum Vitae DOUGLAS W. JONES

#### **Business Address:**

Department of Computer Science University of Iowa, Iowa City, Iowa 52242

Phone: (319)335-0740

E-mail: jones@cs.uiowa.edu

#### **EDUCATIONAL AND PROFESSIONAL HISTORY**

#### 1. Higher Education

- University of Illinois at Urbana Champaign, 1973-1980, Computer Science, MS 1976, PhD 1980.
- Carnegie-Mellon University, 1969-1973, Physics, BS 1973.

#### 2. Professional and Academic Positions

- Associate Professor, 1988-, University of Iowa Department of Computer Science.
- Assistant Professor, 1980-1988, University of Iowa Department of Computer Science.
- Teaching Assistant, 1980, University of Illinois Physician Computer Science Training Program.
- Research Assistant, 1973-1980, University of Illinois Medical Computing Laboratory.
- Resident Visitor, 1973-1974, Bell Telephone Laboratories Acoustics Research Department, Murray Hill.
- Programmer, 1972, Com Share Incorporated, Ann Arbor.

#### 3. Honors and Awards

- University of Iowa Office of Services for the Handicapped Certificate of Recognition, 1980.
- Tau Beta Pi, the National Engineering Honor Society, 1980.
- The Honor Society of Phi Kappa Phi, 1980.

## 4. Memberships

- Senior member, Association for Computing Machinery.
- American Association for the Advancement of Science.

# **TEACHING AT THE UNIVERSITY OF IOWA**

# 1. Teaching Assignments

Semester		Course	Class Size	Course Name
2017	spring	CS:2820	80	Object Oriented Software
		CS:5990	1	Indiv Programming Project (PDP-8)
2016	fall	CS:4980	20	Compiler Construction
		CS:5990	1	Indiv Programming Project (PDP-8)
	spring	CS:2820	65	Object Oriented Software
	fall	CS:2820	46	Object Oriented Software
2015	fall	CS:4980	7	Computer History
2015		CS:2630	56	Computer Organization
	spring	CS:5990	4	Indiv Programming Project (PDP-8)
	£-II	CS:2630	48	Computer Organization
	fall	CS:5990	6	Indiv Programming Project (PDP-8)
2014		22C:60	58	Computer Organization
	spring	22C:196	23	Compiler Construction
		22C:199	6	Indiv Programming Project (PDP-8)
	fall	22C:112	45	Operating Systems
2013	spring	22C:060	42	Computer Organization
		22C:196	23	Compiler Construction
	fall	22C:112	24	Operating Systems
2012	spring	22C:060	47	Computer Organization
		22C:112	15	Operating Systems
	fall	22C:060	28	Computer Organization
2011	spring	22C:112	20	Operating Systems
		22C:169	32	Computer Security
	fall	22C:60	23	Computer Organization
2010	spring	22C:112	31	Operating Systems
		22C:169	34	Computer Security
2000	fall	22C:60	29	Computer Organization
2009	spring	22C:112	33	Operating Systems
0000	fall	22C:60	30	Computer Organization
2008	spring	22C:112	25	Operating Systems
2007	fall	22C:60	24	Computer Organization
2007	spring	22C:169	38	Computer Security

2006	fall	22C:60	23	Computer Organization
2006	spring	22C:169	9	Computer Security
	fall	22C:60	25	Computer Organization
	summer	22C:60	12	Computer Organization
		22C:60	37	Computer Organization
	spring	22C:169	45	Computer Security
	fall	22C:60	49	Computer Organization
2004	summer	22C:50	11	Introduction to System Software
	spring	22C:122	27	High Perf. Computer Architecture
	fall	22C:40	42	Computer Org. and Hardware
2003	lali	22C:50	32	Introduction to System Software
2003	onring	22C:122	25	High Perf. Computer Architecture
	spring	22C:50	63	Introduction to System Software
	fall 22C:116 10 Advanced Operating Systems		Advanced Operating Systems	
2002	opring	22C:116	14	Advanced Operating Systems
	spring	22C:294	5	Topics kernel design
	fall	22C:116	14	Advanced Operating Systems
2001		22C:196		Topics Computers in Voting and Elections
	spring	22C:122	18	High Perf. Computer Architecture
	£_11	22C:116	25	Advanced Operating Systems
2000	fall	22C:50	41	Introduction to System Software
	spring	22C:116	19	Advanced Operating Systems
	fall	22C:116	32	Advanced Operating Systems
1999		22C:122	7	High Perf. Computer Architecture
	spring	22C:116	18	Advanced Operating Systems
	fall	22C:116	25	Advanced Operating Systems
1998		22C:122	11	Advanced Computer Architecture
1990	spring	22C:116	31	Advanced Operating Systems
		22C:122		Advanced Computer Architecture
	fall	22C:116	31	Advanced Operating Systems
1997	summer	22C:18	11	Computer Org. and Assembly Lang. Prog.
	spring	22C:116	15	Advanced Operating Systems
	fall	22C:18		Computer Org. and Assembly Lang. Prog.
1996		22C:116		Advanced Operating Systems
1990	spring	22C:18		Computer Org. and Assembly Lang. Prog.
		22C:122		Advanced Computer Architecture
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	fall	22C:116	29	Advanced Operating Systems
1995	enring	22C:116		Advanced Operating Systems
	spring	22C:216	12	Topics in Operating Systems
1994	spring	22C:116 Advanced Operating Systems		
	foll	22C:16		Intro. to Prog. and Problem Solving in Pas
1993	fall	22C:18		Computer Org. and Assembly Lang. Prog.
	spring	22C:16		Intro. to Prog. and Problem Solving in Pas
1992	spring	22C:116		Advanced Operating Systems
1992	fall	22C:194 Topics Discrete Event Simulation		Topics Discrete Event Simulation
	spring	22C:32		Introduction to System Software
1991	fall	22C:5		Problem Solving and Computing
	lali	22C:31		Digital Systems and Computers
1990	spring	22C:18		Computer Org. and Assembly Lang. Prog.
1989	fall	22C:18		Computer Org. and Assembly Lang. Prog.
1909	spring	22C:122		Advanced Computer Architecture
1988	spring	22C:31		Digital Systems and Computers
	fall	22C:31		Digital Systems and Computers
1987		22C:32		Introduction to System Software
198/	spring	22C:32		Introduction to System Software
		22C:216		Advanced Operating Systems
	fall	22C:32		Introduction to System Software
1986	opring	22C:18		Computer Org. and Assembly Lang. Prog.
	spring	22C:116		Operating Systems
1005	fall	22C:18		Computer Org. and Assembly Lang. Prog.
1985	spring	22C:116		Operating Systems
	fall	22C:32		Introduction to System Software
1984		22C:216		Advanced Operating Systems
	spring	22C:116		Operating Systems
	fall	22C:31		Digital Systems and Computers
1983		22C:216		Advanced Operating Systems
	spring	22C:116		Operating Systems
	fall	22C:19		Discrete Structures
1982		22C:23		Programming Language Concepts
	spring	22C:32		Introduction to System Software
	f a li	22C:32		Introduction to System Software
1981	fall	22C:216		Advanced Operating Systems
	spring	22C:32		Introduction to System Software

1980 fal	fall	22C:31	Digital Systems and Computers
	тан	22C:32	Introduction to System Software

# 2. Students Supervised

Degree Objective	Student Name	Years	Outcome
	Paul Cotton	2008-	quit at MS
  PhD	Robert Hansen -		quit ABD
FIID	Herbert Hoeger (co advised)	-1995	completed
	Rex Gantenbein	-1986	completed
	Madhavi Reddy Chinthakuntla	-1993	completed
	Arash Barani	-1992	completed
MS+	Frank Miller	-1989	completed
INIOT	Jing Jan	-1987	completed
	Wilson Pan	-1986	completed
	George Singer	-1985	completed

Degree Objective	Student Name	Years	Outcome
	Adlai Griffith	-2000	completed
	Edward W. Sihler	-2000	completed
	Jerry Medved	-1992	completed
	Keith Miller	-1991	completed
	Reuven Shapira	-1988	completed
Honors	Leonard Wanger	-1987	completed
HOHOIS	Yvette Ruiz	-1986	completed
	Kailon Goettsche	-1986	completed
	Kjell Holtsmark	-1985	completed
	Tim Bosserman	-1983	completed
	Michael Soenksen	-1983	completed
	Bryan Willman	-1982	completed
		2011-12	9
		2010-11	13
		2009-10	10
Undergraduate advis	sees	2008-09	11
		2007-08	11
		2006-07	14
		2005-06	15

# 3. Other Contributions to Instructional Programs

# **Guest Lectures**

Semester		Course	Course Name
2008	fall	22C:196	Topics in CS: Privacy and Anonymity Topic: Electronic Voting
2007	spring	36:43	Rhetoric, Science and Technololgy title: E-Voting in the 2006 Dutch Elections
2006	fall	22C:196:001	Human Computer Interaction title: Ballot design.
2004	fall	55:91	Professional Seminar in Electrical Engineering title: Computers in Elections.
2004		30:119	Problems in American Politics: The 2004 Elections title: Voting Technology.
2001	spring	55:91	Professional Seminar in Electrical Engineering title: Computers in Elections.
1998	fall	55:91	Professional Seminar in Electrical Engineering title: The Trippy, a case study.
1996	spring	55:91	Professional Seminar in Electrical Engineering title: The Trippy, a case study.
1997	fall	Professional Seminar in Electrical Engineering title: The Trippy, a case study.	
1992	spring	108:190	The Arts and Technologies of the Book title: Evolution of bookmaking technologies.

#### **SCHOLARSHIP**

## 1. Publications or Creative Works

For multi-authored work, the following marks indicate

- \* = senior author, major contribution
- \*\* = secondary contribution
- \*\*\* = equal contribution
- \*\*\*\* = minor contribution

# 1. Refereed

- Books and Monographs
  - Foreword, in *E-Voting Case Law: A Comparative Analysis*, Ardita Driza Maurer, Editor, Ashgate, publication pending, mid 2015. 3 pages.
  - Computer Security Versus The Public's Right to Know, in Was Your Vote Counted?, Bobby M. Tuazon, Editor, Cen PEG Books, Quezon City, Philippines, 2013; pages 125-131.

- Broken Ballots, D.W. Jones\*\*\*, Barbara Simons\*\*\*, Center for the Study of Language and Information (Stanford), 2012, 445 pages. Published in Estonian as Rikutud Sedelid, 2012. Published in Russian (Abridged) as Испорченные бюллетени, 2013.
- Kazakhstan: The Sailau E-Voting System, in *Direct Democracy: Progress and Pitfalls of Election Technology*, Michael Yard, Editor, IFES, 2010; pages 57-70 (pages 74-95 in the 2011 edition).
- On Optical Mark-Sense Scanning, in *Towards Trustworthy Elections*, David Chaum, Marcus Jacobsson, Ronald Rivest, Peter Ryan, Josh Benaloh, Miroslaw Kutylowski, Ben Adida, Editors, Springer Lecture Notes on Computer Science subseries on Security and Cryptology, Vol. 6000, 2010; pages 175-190.
- OSCE/ODIHR Election Observation Mission final report on the 18 August 2007 Parliamentary Election in the Republic of Kazakhstan, Organization for Security and Cooperation in Europe, Office for Democratic Institutions and Human Rights, Warsaw, October 30, 2007. (19 members of the core team; D. W. Jones\*\*\*, Marcin Cieslak\*\*\* and Peter Wolf\*\* drafted the section on electronic voting.)
- Perspectives on Electronic Voting, in From Power Outages to Paper Trails
   Experiences in Incorporating Technology into the Election Process, IFES white paper, April 3, 2007 (15 pages out of 35).
- OSCE/ODIHR Election Assessment Mission report on the 22 November 2006 Parliamentary Election in the Netherlands, Organization for Security and Cooperation in Europe, Office for Democratic Institutions and Human Rights, Warsaw, March 12, 2007. (9 members of the mission; D. W. Jones\*\*\* and Tarvi Martens\*\*\* drafted the section on electronic voting.)
- The Machinery of Democracy -- Protecting Elections in an Electronic World, Report of the Task Force on Voting System Security Lawrence Norden, chair, Brennan Ctr. for Justice at NYU School of Law, 2006 (147 pages, 18 task-force members; D. W. Jones\*\* contributed Appendix E, 8 pages.) Acad. Chicago Publ., 2007 (200 pages).
- OSCE/ODIHR Election Observation Mission final report on the 4 December 2005 Presidential Election in Kazakhstan, Organization for Security and Cooperation in Europe, Office for Democratic Institutions and Human Rights, Warsaw, Feb. 21, 2006. (34 pages, 17 members of the core observing team; D. W. Jones\*\*\* and Herman Ruddijs\*\*\* drafted section VI on electronic voting and recommendations 15-19.)
- Evaluation of Voting Technologies, Chapter 1 of Secure Electronic Voting Dimitris Gritzalis, ed. Kluwer Academic Publishers, 2002 (13 pages out of 240).

■ Handbook of Small Electric Motors William H. Yeadon\* and Alan W. Yeadon, eds. McGraw Hill, 2001 (1071 pages, 39 contributors). D. W. Jones\*\*\* contributed section 5.2.10 (16 pages) and sections 10.8 to 10.10 (27 pages).

#### Articles

- "Douglas Jones on Today's Voting Machines," Douglas W. Jones\*\*\*, Hal Berghel, *IEEE Computer, 49,* 10 (Oct. 2016) pages 84-89. Reprinted in *IEEE Computing Edge,* Dec. 2016, pages 10-15.
- "Internet Voting in the U.S.," Barbara Simons\*\*\*, D.W. Jones\*\*\*, Communications of the Association for Computing Machinery, 55, 10 (Oct. 2012) 68-77.
- "Voting Systems Would Benefit from More Attention to Human Factors," Mike Byrne\*\*\*, Tiffany Jastrzembski\*\*\*, Douglas W. Jones\*\*\*, Bill Killam\*\*\*, Whitney Quesenbery\*\*\*, Human Factors and Ergonomics Society, Oct. 27, 2008.
- "A Conversation with Douglas W. Jones and Peter G. Neumann," Douglas W. Jones\*\*\*, Peter G. Neumann, *ACM Queue*, *4*, 9 (Nov. 2006).
- "System for handicapped access to voting ballots," U.S. Patent 7,134,597 (Nov. 14, 2006).
- "Evaluation of Voting Systems," Poorvi L. Vora\*, Benjamin Adida\*\*\*, Ren Bucholz\*\*\*, David Chaum\*, David L. Dill\*\*\*, David Jefferson\*\*\*, Douglas W. Jones\*\*\*, William Lattin\*\*\*, Aviel D. Rubin\*\*\*, Michael I. Shamos\*\*\*, and Moti Yung\*\*\* Communications of the Association for Computing Machinery, 47, 11 (Nov. 2004) 144.
- "Misassessment of Security in Computer-Based Election Systems,"
   Cryptobytes, 7, 2 (Fall 2004) 9-13.
- "Auditing Elections," Communications of the Association for Computing Machinery, 47, 10 (Oct. 2004) 46-50.
- "Integrating Concurrent and Conservative Distributed Discrete-Event Simulators" H. R. Hoeger\* and D. W. Jones\*\* Simulation, 67 5 (Nov. 1996) 303-314.
- "Concurrent Operations on Priority Queues," *Communications of the Association for Computing Machinery*, *32*, 1 (Jan. 1989) 132-137.
- "The Design and Implementation of a Dynamic Binding Feature for a High-Level Language," R. E. Gantenbein\*\* and D. W. Jones\*, *The Journal of Systems and Software*, 8, 4 (Sept. 1988) 259-273.

- "Application of Splay Trees to Data Compression, Communications of the Association for Computing Machinery, 31, 8 (Aug. 1988) 996-1007.
- "A Note on Bottom-Up Skew Heaps," *SIAM Journal on Computing, 16,* 1 (Feb. 1987) 108-110.
- "An Empirical Comparison of Priority Queue and Event Set Implementations," Communications of the Association for Computing Machinery, 29, 4 (Apr. 1986) 300-311.
- "Improved Interpretation of UNIX-Like File Names Embedded in Data," *Communications of the Association for Computing Machinery, 27,* 8 (Aug. 1984) 782-784.
- "Assembly Language as Object Code," Software Practice and Experience, 13, 8 (Aug. 1983) 715-725.
- "Programs as Higher Level Subroutines," D. W. Jones\*, A. B. Baskin\*\*, T. Chen\*\*\*\*, and L. Bloomfield\*\*, *Software -- Practice and Experience*, 9, 2 (Feb. 1979) 149-155.

#### 2. Non-refereed

- Declaration opposing a preliminary injunction to stop the Wisconsin recount,
   Great America Pac v. Wisconsin Elections Commission, No. 16 Civ. 00795, (W.D. Wis., 2016) dated Dec. 7, 2016.
- Affidavit in Support of Motion for Temporary Restraining Order to Enjoin Delay of Michigan Statewide Recount of 2016 Presidential Election, Stein v. Thomas, No. 16-cv-14233, Dkt. No. 3-10 (E.D. Mich. Dec. 2, 2016), dated Nov. 30, 2016.
- Affidavit in support of Jill Stein's petition for a hand recount of all ballots in Wisconsin pursuant to Wisconsin Statutes Section 5.90(2), Stein v. Wisconsin Elections Commission, Case No. 16 CV 3060 (Wis. Circuit Ct., Dane Cnty. 2016), dated Nov. 28, 2016.
- "Some modest proposals for voter signature verification", guest editorial, *Iowa City Press-Citizen*, Nov. 29, 2012.
- Expert Report / Conroy et al v. Dennis, (small portions redacted), Sept. 5, 2006, 16 pages.
- Regarding the Voting Systems Standards Proposed by the New York State Board of Elections in February 2006, public comment to the New York State Board of Elections, Feb. 24, 2006, 5 pages.
- Regarding the Voting Systems Standards Proposed by the New York State Board of Elections in December 2005, public comment to the New York State Board of Elections, Jan. 23, 2006, 16 pages.

- Regarding the Optical Mark-Sense Vote Tabulators in Maricopa County, prepared for the Arizona Senate Government Accountability and Reform Committee, Jan. 12, 2006, 31 pages.
- Stepping Motor Fundamentals, R. Condit\*\*\* and D. W. Jones\*\*\*, Microchip Corporation Applications Note AN907, 2004, 22 pages.
- Letter in response to the editorial question "Is Computer Science an Engineering Discipline," *The Bent of Tau Beta Pi, 93,* 1 (Winter 2002) 8-9.
- "The Digital PDP-8 Story," a 3-part series, *Historically Brewed, Newsletter of the Historical Computer Society, 7, 8, 9* (Sept-Oct 1994) 7-10, (1995) 7-10, (1996) 11-14.
- "Origins and Legacy of the IBM 701," *The Analytical Engine, Newsletter of the Computer History Association of California*, 1, 3 (Jan. 1994) 21-28.
- "How (Not) to Code a Finite State Machine," *Association for Computing Machinery Special Interest Group on Programming Languages Notices*, 23, 8 (Aug. 1988) 19-22.
- "The Ultimate RISC," Computer Architecture News, 16, 3 (June 1988) 48-55.
- "A Minimal CISC," Computer Architecture News, 16, 3 (June 1988) 56-63.
- *Iowa Capability Architecture Project ICAP Programmer's Reference Manual,* University of Iowa Computer Science Technical Report 85-06 (1985).
- "Can High-Tech Save the Iowa Economy", WSUI/KSUI Faculty Commentary, broadcast Oct. 18 and 21, 1982.
- Machine Independent SMAL: A Symbolic Macro Assembly Language, University of Iowa Computer Science Technical Report 82-03 (1982), revised as Technical Report 84-09 (1984).
- The Systematic Design of a Protection Mechanism to Support a High Level Language, revision of PhD Thesis, University of Iowa Computer Science Technical Report 81-04 (1981).
- "Tasking and Parameters: A Problem Area in Ada," Association for Computing Machinery Special Interest Group on Programming Languages Notices, 15, 5 (May 1980) 37-40.
- "A Note on Some Limits of the Algebraic Specification Method," Association for Computing Machinery Special Interest Group on Programming Languages Notices, 13, 4 (Apr. 1978) 64-67.
- "Sorting Methods for MODCOMP Computers," *MUSE News (the newsletter of the MODCOMP user's group)*, Jan. 1978, 149-155.

 Run Time Support for the TUTOR Language on a Small Computer System, revision of MS Thesis, University of Illinois Department of Computer Science Technical Report UIUCDCS-R-77-868, May 1977.

#### 3. Web Based

- *The Ternary Manifesto* http://www.cs.uiowa.edu/~jones/ternary/, work on ternary logic and ternary arithmetic.
- The University of Iowa's DEC PDP-8, http://www.cs.uiowa.edu/~jones/pdp8/UI-8/, comprehensive documentation of the effort to restore a 50-year-old computer to operating condition.
- Testing Voting Systems, http://www.cs.uiowa.edu/~jones/voting/testing.shtml, originally posted 2004. This web page is mirrored on the Verified Voting Foundation web site and it has been used as a reading in several courses on voting systems at other universities.
- Counting Mark-Sense Ballots, http://www.cs.uiowa.edu/~jones/voting/optical/, originally posted 2002.
- Chad, from Waste Product to Headline, http://www.cs.uiowa.edu/~jones/cards/chad.html, originally posted 2000, major revisions 2001. This work led to stories in the Palm Beach Post on Dec. 9 and Dec. 31 2001; the latter on the front page.
- Computer Control of Stepping Motors, http://www.cs.uiowa.edu/~jones/step/, originally posted 1990, major revisions 1995 and 1998.
- A Tutorial Introduction to Bookbinding, http://www.cs.uiowa.edu/~jones/book/, originally posted 1995. Judged "Information Value of the Week" by the Austria Information Switchboard, July 12, 1997, "one of the best 3,000 sites of interest for New Zealanders," by the Internet Phone Book, June 1998, "`Free Stuff' Best of the Web," by C&T Publishing, November 1999, "Selected Instructional Site," WannaLearn.com, June 2000, and added to the Swedish Schoolnet Link Larder, Dec 2000.
- The Prairie Paper Project, http://www.cs.uiowa.edu/~jones/prairiepaper.html, originally posted 1995. Judged "Web Draw Site of the Week," February 10, 1997, by PulpandPaper.net.

# 2. Published Reviews of Scholarship

#### 3. **Grants**

- External:
  - Jinn A/S: Development of Efficient Implementations for Ternary Arithmetic Operations, 2015.

- The Democracy Fund (Omidyar Network Fund, Inc.): End-to-End Verifiable Internet Voting: Specification and Feasibility Assessment Study. (Travel and logistic support), 2013.
- NSF Collaborative Research grant CNS-052431: CT-CS: A Center for Correct, Usable, Reliable, Auditable, and Transparent Elections (ACCURATE), awarded 8/15/05, extended 8/23/2010, ended 9/30/2011.
- Basic Telepresence Incorporated (Summer Support), 1997, 1999, 2000.
- Army Research Office Contract MDA903-90-C-0154 (Summer Support), co-PI, 1991, 1992.
- University of Iowa Department of Physics, subcontract under NASA Contract NAS5-30316 (Summer Support), 1989.
- Rockwell International, Collins Government Avionics Division (Summer Support), 1986.
- Norand Corporation Applied Academics Contract (Summer Support), 1985.

#### o Internal:

- Rockwell Collins Televideo Funds (summer support), 2001, 2002, 2003
- Developmental Leave, fall 1994.
- Developmental Leave, fall 1988.
- Old Gold Summer Fellowship, 1982.
- University of Iowa Council on Teaching grant to refit computer terminals for use by students with severe motor disabilities.
- Old Gold Summer Fellowship, 1981.

#### 4. Invited Papers and Conference Proceedings

- "The Election of 2016: Was It Hacked," invited talk before the Iowa City Foreign Relations Council, March 9, 2017. Video transcript on the ICFRC YouTube channel.
- o ``The Help America Vote Act of 2002, a Retrospective," address to the Iowa City Noon Rotary Club, Iowa City, Iowa, Jan. 16, 2014.
- "Current Trends in US Voting," address to the League of Woman Voters of Johnson County, Iowa City, Iowa, Dec. 7, 2013.
- "What Do We Need in Voting System Standards," panel discussion participant, NIST/EAC Future of Voting Systems Symposium, February 27, 2013, Gaithersburg, MD.

- o "Election Technology", University of Iowa Tech Forum, May 16, 2012.
- "SOBA: Secrecy-preserving Observable Ballot-level Audit", Josh Benaloh\*\*\*, Douglas Jones\*\*\*, Eric L. Lazarus\*\*\*, Mark Lindeman\*\*\*, Philip B. Stark\*\*\*, EVT/WOTE '11: 2011 Electronic Voting Technology Workshop / Workshop on Trustworthy Elections, August 9, 2011, San Francisco, CA.
- "Sarasota Panel: Vote-o-graph results from lowa", panel discussion participant, EVT/WOTE '11: 2011 Electronic Voting Technology Workshop / Workshop on Trustworthy Elections, August 8, 2011, San Francisco, CA.
- "The Conflict Between Transparency and Security", Invited presentation, FIT4E -Filipino IT for Election Conference, June 13, 2011, Quezon City, Philippines (by video link).
- "Current and Emerging Technology in Election and Voting Cases", Election Law and Voting Issues Seminar (ELVIS), U.S. Department of Justice National Advocacy Center, September 1, 2010, Columbia, SC.
- "Towards Publishable Event Logs That Reveal Touchscreen Faults", Andrea Mascher\*\*\*, Paul Cotton\*\*\* and Douglas Jones\*\*\*, EVT/WOTE '10: 2010 Electronic Voting Technology Workshop / Workshop on Trustworthy Elections, August 10, 2010, Washington DC.
- "Internet Voting for UOCAVA Voters Note on the Relevance of European Experience", invited position paper, Workshop on UOCAVA Remote Voting Systems, Washington DC, August 6, 2010.
- "Vote-O-Graph: A Dishonest Touchscreen Voting System" (Extended Abstract), Andrea Mascher\*\*\*, Paul Cotton\*\*\* and Douglas Jones\*\*, CHI 2010: 28th ACM Conference on Human Factors in Computing Systems, April 13, 2010, Atlanta.
- "Early Requirements for Mechanical Voting Systems," invited paper, First International Workshop on Requirements Engineering for E-voting Systems, August 31, 2009, Atlanta.
- "Improving Voting System Event Logs," Andrea Mascher\*\*\*, Paul Cotton\*\*\* and Douglas Jones\*\*, First International Workshop on Requirements Engineering for E-voting Systems, August 31, 2009, Atlanta.
- Panelist, with John Sebes, Dan Wallach, David Wagner and Jeremy Epstein,
   "Technology Lessons Learned from Election 2008," RSA Security Conference, April 21, 2009, San Francisco.
- "The Trials and Tribulations of Electronic Voting," invited talk, Institute for Civic Discourse and Democracy, Kansas State University Libraries and Department of Computing and Information Sciences, Kansas State University, September 16, 2008.
- o "International Election Observervation," invited talk before the Manhattan/Riley County Kansas League of Women Voters, September 16, 2008.

- Panelist, with David Wagner, Hugh Thompson, Alec Yasinsac and Gary McGraw,
   "Electronic Voting, the Politics of Broken Systems," RSA Security Conference, April 10, 2008, San Francisco.
- "International Election Observer -- Kazakhstan and the Netherlands," invited talk before the Iowa City Foreign Relations Council, January 29, 2008. Broadcast on WSUI, 9 PM, February 3, 2008.
- o "Observing Elections," invited talk, VoComp, July 17, 2007, Portland, Oregon.
- "Computer Security Versus the Public's Right to Know," a panel discussion on "Electronic Voting Integrity," 17th Conference on Computers, Freedom and Privacy, May 4, 2007, Montreal.
- Participant, OSCE/ODIHR Expert Meeting on "Election Observation and Electronic Voting," 22-23 March, 2007, Warsaw.
- "The Trials and Tribulations of Electronic Voting," and "Voting Security A Technical Perspective," invited talks for the University of South Carolina Cybersecurity Symposium, October 27, 2006, Columbia, South Carolina.
- "Technologists as Political Reformers, Lessons from the Early History of Voting Machines," presented at the Society for the History of Technology annual conference, Las Vegas, October 13, 2006.
- "The Trials and Tribulations of Electronic Voting," invited talk, Indian Hills Community College and the Ottumwa chapter of the League of Women Voters, Ottumwa, Iowa, October 9, 2006.
- o "Secure Data Export and Auditing Using Data Diodes," Douglas W. Jones\* and Tom C. Bowersox\*\*, Proceedings of the USENIX/ACCURATE Electronic Voting Technology Workshop (EVT'06), August 1 2006, Vancouver Canada (Proceedings published on-line at http://www.usenix.org/events/evt06/tech/). Half of the papers submitted to this workshop were accepted.
- "Update on Electronic Voting and Paper Trails," panel discussion, Coalition for A Revitalized League Caucus on Electronic Voting, League of Women Voters National Convention 2006, Minneapolis, June 10, 2006.
- "Connecting Work on Threat Analysis to the Real World," invited paper, VSRW 06
   Workshop on Threat Analysis for Voting System Categories, Washington, DC, June 8, 2006.
- "Elections & Electronic Voting Machines -- Technology, technologists and public policy,"
   Address to the IEEE Cedar Rapids Section, Iowa City, April 27, 2006.
- "Voting System Standards," Testimony before the Connecticut Voting Technology Standards Board, Hartford, Connecticut, January 13, 2006.

- "Threats to Voting Systems," NIST Workshop on Developing an Analysis of Threats to Voting Systems, Gaithersburg, Maryland October 7, 2005.
- "Keeping Electronic Voting Honest," AAAS Annual Meeting, Washington, DC, February 18, 2005.
- "Reducing the Trusted Base," Invited position statement for the Computer Science and Telecommunications Board of the National Acadamies Framework for Understanding Electronic Voting, Washington DC, December 9, 2004.
- "Reliability of US Voting Systems: An assessment in the light of recent changes,"
   Hearing on Election Preparedness, Congressional Black Caucus, Washington, DC,
   October 7, 2004.
- "Voting System Transparency and Security: The need for standard models," U. S. Election Assistance Commission Hearing on Transparency and Security, National Institute of Standards and Technology, Gaithersburg, MD, September 20, 2004.
- "On Optical Scanning," DIMACS Workshop on Electronic Voting -- Theory and Practice, Rutgers University, Piscataway, NJ, May 27, 2004.
- "Electronic Voting is Hard to Certify," Workshop on Software Certification and Dependability, Computer Science and Telecommunications Board of the National Acadamies Washington DC, March 1, 2004.
- "How Do You Know Your Vote Was Counted," Invited Lecture, jointly by the Springfield Chapters of the ACLU and NAACP, University of Illinois at Springfield Office of Multicultural Affairs and Women's Studies Program, Springfield, Illinois, April 14, 2004.
- Joint presentation on the dilemmas posed by the Help America Vote Act, Chet Culver (Iowa Secretary of State)\*\*\* and Douglas W. Jones\*\*\*, Iowa State Association of Counties, Des Moines, Iowa, March 17, 2004.
- "Strengths and Weaknesses of Voting Systems," keynote address, Second Inter-American Meeting on Electoral Technology, Organization of American States, Panama City, Panama, March 1, 2004.
- "How Safe is our Voting System," Cornell College, Mount Vernon, Iowa, January 8, 2004.
- "Why Trustworthy Voting Systems Require Institutionalized Distrust," First Symposium on Building Trust and Confidence in Voting Systems, National Institute of Standards and Technology, Gaithersburg, maryland, Dec 10, 2003.
- Featured speaker, Internet and Public Policy Project forum, School of Public Policy, Georgia Institute of Technology, Atlanta, Georgia, Oct 16, 2003.
- "The Diebold AccuVote TS Should be Decertified," Introductory remarks for a panel discussion on Electronic Voting, 12th USENIX Security Symposium, Washington, DC, Aug 6, 2003.

- o "The Case Against the Diebold AccuVote TS," USACM Workshop on Voter-Verifiable Election Systems, Denver, July 28, 2003.
- "E-voting, Are our defenses adequate to defend citizen rights?" International Telecommunication Union Workshop on Challenges, perspectives and standardization issues in E-Government, Geneva, June 6, 2003.
- "Human Factors in Voting Technology, an Ethical Response," Council on Governmental Ethics Laws, Ottowa, Sept 30, 2002.
- "Voting System Standards -- Work that Remains to be Done," Hearing before the Federal Election Commission, Washington DC, Apr 17, 2002.
- "End-to-End Standards for Accuracy in Paper-Based Systems," Workshop on Election Standards and Technology, Washington DC, Jan. 31, 2002.
- "Election Reform in Iowa," National Conference on Governance, National Civic League, Washington DC, Nov. 17, 2001.
- "Problems with Voting Systems and the Applicable Standards," *Improving Voting Technology*, Hearing before the Committee on Science, House of Representatives, 107th Congress, Washington DC, May 22, 2001. USGPO Serial No. 107-20, pages 18-19 (oral statement) and pages 85-99 (written statement).
- "Counting Votes with Comptuers," keynote address to the League of Woman Voters of Johnson County, Iowa City, Iowa, May 16, 2001.
- "Evaluating Voting Technology," Testimony before the United States Civil Rights Commission, Tallahassee, Florida, January 11, 2001.
- "E-Voting -- Prospects and Problems," 31<sup>st</sup> Annual Tau Beta Pi Paul D. Scholz Symposium, University of Iowa, April 13, 2000. (reprinted without permission by FreePublic.com on Nov 16, 2000.)
- o *Step Motor Course*, an intensive 3-day shourt course, H. D. Chai\*\*\*, D. W. Jones\*\*\* and W. H. Yeadon\*\*\*, Small Motor Manufacturer's Association Motor College, August 6-8 1996, San Jose. (Chapters 4, 6 and 8 are by Jones.)
- Invited Presentation, Workshop on Expanding and Refining High School Computing, March 22, 1995, Coe College, Cedar Rapids.
- "Simulation of Information Flow in Organizations," *Proceedings of the 1993 Winter Simulation Conference*, Dec. 12-15, 1993, Los Angeles, 1388-1389.
- "A Generalized Hold Model," C. C. Chou\*, S. C. Bruell\*\*, D. W. Jones\*\*, W. Zhang\*\*, Proceedings of the 1993 Winter Simulation Conference, Dec. 12-15, 1993, Los Angeles, 756-761.
- "Practical Evaluation of a Data Compression Algorithm," Proceedings of the 1991 Data Compression Conference, Snowbird, Utah, April 8-10 1991, 372-381.

- "Concurrent Simulation of Queueing Networks: Limitations and Potentials," S. C. Bruell\*\*\*, C. C. Chou\*\*\*, D. W. Jones\*\*\*, W. Zhang\*\*\*, D. Renk\*\*\*, *Proceedings of the 21st Annual Pittsburgh Conference on Modeling and Simulation*, May 3-4, 1990, Pittsburgh, 1189-1193.
- "Experience with Concurrent Simulation," D. W. Jones\*\*\*, Chien-Chun Chou\*\*\*, Debra Renk\*\*\*, S. C. Bruell\*\*\*, *Proceedings of the 1989 Winter Simulation Conference*, Dec. 4-6, 1989, Washington DC, 756-764.
- "The Iowa Logic Specification Language," a colloquium, June 9, 1988, CERN, Geneva Switzerland.
- "Resource Protection," guest lecture, June 2, 1987, Maharishi International University, Fairfield Iowa.
- "Fault-Tolerant Real-Time Control in the PRISM Environment," Proceedings of the Rockwell International Software Engineering Symposium, Oct 6-8, 1986, Cedar Rapids, Iowa, 4.1.1-4.1.13.
- "Fault-Tolerant Real-Time Control in PRISM," a colloquium, September 25, 1986, Iowa State University.
- "Concurrent Simulation: An Alternative to Distributed Simulation," Proceedings of the 1986 Winter Simulation Conference, Dec. 8-10, 1986, Washington DC, 417-423.
- "Implementations of Time," Douglas W. Jones\*, J. O. Henriksen\*\*\*, C. D. Pegden\*\*\*, R. G. Sargent\*\*\*, R. M. O'Keefe\*\*\*, and B. W. Unger\*\*\*, *Proceedings of the 1986 Winter Simulation Conference*, Dec. 8-10, 1986, Washington DC, 409-416.
- "Dynamic Binding of Separately Compiled Objects Under Program Control," R. E.
   Gantenbein\* and D. W. Jones\*\*, Proceedings of the 1986 Association for Computing Machinery Computer Science Conference, Feb. 4-6, 1986, Cincinnati Ohio, 287-292.
- "Systematic Protection Mechanism Design," Proceedings of the Symposium on Architectural Support for Programming Languages and Operating Systems, March 1-3, 1982, Palo Alto California, 77-80.
- "A Local Node in a Medical Depository Network," T. T. Chen\*, A. B. Baskin\*\*, D. W. Jones\*\*, L. Sherman\*\*\*\*, L. Bloomfield\*\*\*\*, and A. H. Levy\*\*\*\*, *Institute of Electrical and Electronics Engineers Conference Proceedings, COMPSAC-77*, Nov. 1977, Chicago, 66-70.

# 5. Other

 Joseph Hanauer, Ring of Fire Press, East Chicago, Indiana, 2013. 129 pages. First serialized on-line in *Grantville Gazette 8*, 2006, *Gazette 13*, 2007, and *Gazette 14*, 2007.

- "Jews and Muslims in a Christian Majority Nation," with Shams M. Ghoneim, Indian Hills Community College 6th Annual Diversity Conference, Ottumwa Iowa, April 16, 2010.
- o "Schwarza Falls," a short story, in *Grantville Gazette V*, Eric Flint (ed), Baen Books, hardcover, 2009, paperback 2011. First published on-line in *Grantville Gazette 5*, 2005.

#### **SERVICE**

## 1. Department

- Led effort to restore 50-year-old PDP-8 computer, 2004-
- Member, Recruiting Committee, 2008-2009.
- Member, Recruiting Committee, 2007-2008.
- o Chair, Undergraduate Committee, 1999-2003.
- o Member, Recruiting Committee, 1991-1992.
- o Member, Graduate Committee, 1991-1992.
- o Associate Chairman, 1989-1990.
- o Member, Undergraduate Committee, 1984-1990.
- Chair and author of final report, Ad-Hoc Committee on Accreditation of the BS Degree Program, 1987.
- o Chair, Recruiting Committee, 1982-1984.
- o Member, Laboratory Committee, 1980-1983.
- Coordinator, departmental proposal to the Army Research Office for graduate fellowships in computer science, 1982.
- Recording Secretary, 1981-1982.
- o Member, Graduate Committee, 1980-1981.

#### 2. College

- o Chair, Liberal Arts And Sciences Faculty Assembly, 2002-2003.
- Member, Liberal Arts Faculty Assembly, 1993-2003.
- Member, Historical Perspectives GER Coordinating Committee, 1989-1991
- o Member, Graduate College Foreign Student Committee, 1982-1985.

# 3. University

- Secretary, Governing board of the Aliber-Hillel student center, 1998-2001 (Hillel serves the needs of Jewish students at the University of Iowa.)
- Member, Governing board of the Aliber-Hillel student center, 1994-2007.
- Member, Advanced Computing Facilities Committee, 1990-1996.
- o Member, Presidential Scholarship Selection Committee, 1991-1994.
- Member, Search Committee for Associate Vice President for Research and Director of the Office of Information Technology, 1992-1993.
- Member, Goldwater Scholarship Selection Committee, 1991.
- o Faculty Representative, Waste Management Committee, 1990-1991.
- Member, Ad Hoc Review Committee for the Office of Services for the Handicapped, 1983.

#### 4. Profession

- Co-chair: 2010 Electronic Voting Technology Workshop / Workshop on Trustworthy Elections (EVT/WOTE '10).
- Co-chair: First International Workshop on Requirements Engineering for E-voting Systems (RE-Vote09).
- Judge and Program Committee: University Voting Systems Competition (VoComp 2007).
- o Program Committee: IAVoSS Workshop on Trustworthy Elections (WOTE 2007).
- Program Committee: EVT'07 Electronic Voting Technology Workshop, 2007.
- Program Committee: EVT'06 Electronic Voting Technology Workshop, 2006.
- Planning committee member: NIST Workshop on Developing an Analysis of Threats to Voting Systems October, 2005.
- Founding Member, Voting Systems Performance Rating, 2005-(defunct by 2009)
- Founding Vice President and Chief Technical Officer, Open Voting Consortium, 2003-2004
- o Member, Advisory Board, VerifiedVoting.org, 2004-2009
- o Member, USACM Committee, the U.S. Public Policy Committee of the ACM, 2003-.
- Member, National Committee on Voting Integrity, 2003-(defunct by 2009)
- Organizing committee member: USACM Workshop on Voter-Verifiable Election Systems, July 2003, Denver.
- Organizing committee member: Georgia Tech Research Institute Internet Voting Workshop, June 2002, Atlanta.
- o Session Chair, Winter Simulation Conference, Dec 1993, New Orleans.
- o Session Chair, Winter Simulation Conference, Dec 1990, New Orleans.
- o Session Chair, Winter Simulation Conference, Dec 1986, New Orleans.
- o Referee for: Communications of the Association for Computing Machinery, Computing Surveys, ACM Transactions on Computer Systems, ACM Transactions on Modeling and Computer Simulation, Institute of Electrical and Electronics Engineers Transactions on Computers, Institute of Electrical and Electronics Engineers Transactions on Distributed Systems, Institute of Electrical and Electronics Engineers Software, Software Practice and Experience, International Journal of Parallel Programming, Journal of Systems and Software, Algorithmica, The Computer Journal the National Computer Conference, the Association for Computing Machinery Computer Science Conference, the Institute of Electrical and Electronics Engineers International Symposium on Software Reliability Engineering
- Reviewed textbook manuscripts for: SRA, John Wiley and Sons, Reston Publishing Company, West Publishing Company. Benjamin Cummings.
- Reviewed grant proposals for: National Science Foundation, International Science and Technology Center (operating in Moscow, funded by the US State Department).

#### 5. Community

- Member, Technical Guidelines Development Committee of the United States Election Assistance Commission, 2009-2012.
- Oral testimony, NAACP vs Cortes, US District Court for Eastern Pennsylvania, October 28, 2008.

- Oral testimony before a Washington DC Council subcommittee hearing on election problems in the September 9 primary, October 3, 2008.
- Oral testimony, In the matter of primary election ballot dispute 2008, Supreme Judicial Court of Maine, July 7, 2008.
- Member of the core team for the Election Observer Mission for the parliamentary election in Kazakhstan, Office for Democratic Institutions and Human Rights, Organization for Security and Co-operation in Europe, 2007.
- Member of the Election Assessment Mission for the parliamentary election in the Netherlands, Office for Democratic Institutions and Human Rights, Organization for Security and Co-operation in Europe, 2006.
- Expert witness, Conroy vs Dennis, District Court of the City and County of Denver, Colorado, September 20-22, 2006.
- Submitted detailed comments, New York State Board of Elections December 2005 Draft Voting System Standards.
- Examined the mark-sense ballot tabulators of Maricopa County, Arizona, at the request of the Government Accountability and Reform Committee of the Arizona Senate, 2005.
- Member of core team for the Election Observation Mission for the presidential election in Kazakhstan, Office for Democratic Institutions and Human Rights, Organization for Security and Co-operation in Europe, 2005.
- o Consultant to Miami-Dade County Elections Department, 2004.
- Unpaid consultant to the Brennan Center for Justice at New York University, 2004-2008.
- o Member, Iowa Election Reform Task Force, 2001.
- Submitted detailed comments, Federal Election Commission July 13 2001 Draft Voting System Standard.
- Submitted detailed comments, Federal Election Commission Dec. 13 2001 Draft Voting System Standard.
- Chair, Iowa Board of Examiners for Voting Machines and Electronic Voting Systems, 1999-2002.
- Member, Iowa Board of Examiners for Voting Machines and Electronic Voting Systems, 1994-2004.