

DANNY Y.C. HO, Ph.D.**Education**

Ph.D. 2011 UMBC, Information Systems, Baltimore, Maryland, United States
 M.A.Sc. 2004 University of Waterloo, Systems Design Engineering, Waterloo, Canada
 B.A.Sc. 2002 University of Waterloo, Systems Design Engineering, Waterloo, Canada
 Graduated with Management Science Option & Human Systems specialization

Teaching and Research Experience

2010 – Present **School of Pharmacy**, Univ. of Waterloo, *Adjunct Clinical Assistant Professor*
 Computing course and Foundations & Application of Health Informatics
 2005 – 2008 **University of Maryland School of Medicine**, *Graduate Research Assistant*
 Research in Patient Safety, Program in Trauma
 Fall 2003 **University of Waterloo**, Systems Design Engineering,
 1st Year Drafting & Design Project course, *Teaching Assistant*
 Fall 2002 **University of Waterloo**, Systems Design Engineering,
Mentorship Leader for first year Engineering students

Industry Experience

2010 – Present **PharmaTrust Corp.**, *Director*, User Research and Experience Design
 2010 – Present **Spirellis**, *Partner*, Information, Interaction, and Interface Design Consultant
 2004 – 2006 **Solutions Outside the Box Inc.**, *Interface Design Consultant & Developer*
 Interface design for international clients in oil and alumina industries
 2004 – 2005 **University of Maryland School of Medicine**
 Human Factors & Technology Group, *Research Analyst*
 Summer 2003 **Shad Valley Waterloo**, *Program Assistant*
 Summer 2001 **Microsoft Corporation**, MSTV Prototyping, *Program Manager Intern*
 Sep-Dec 2000 **724 Solutions Inc.**, User Experience, *User Interface Analyst Intern*
 Jan-Apr 2000 **RM Systems Integrators**, *Industrial Controls Integrator Intern*
 Summer 1999 **RM Systems Integrators**, *Industrial Controls Integrator Intern*

Service

2006 – 2009 Journal of the American Medical Informatics Association (JAMIA)
Student Editorial Board Member
 2007 – 2010 Human Factors & Ergonomics Society Annual Meeting, *Reviewer*
 2007 Departmental Promotion and Tenure Committee, *Graduate Representative*
 2007 Human Factors & Ergonomics Society Annual Meeting, Baltimore, MD
 Cognitive Engineering Session – Influencing How People Work, *Session Chair*
 2007 Computer Human Interaction, *Reviewer*
 2006 Departmental Promotion and Tenure Committee, *Graduate Representative*
 2003 Human Factors & Ergonomics Society Annual Meeting, *Student Volunteer*
 2002 Canadian Undergraduate Technology Conference, *Director of Logistics*
 2001 Canadian Undergraduate Technology Conference, *Director of Logistics*
 2000 Canadian Undergraduate Technology Conference, *Audio-Visual Support*

Affiliations

2006 – Present American Medical Informatics Association, Student Member (CIS WG)
2005 – 2010 Human Factors & Ergonomics Society, Student Member (Healthcare WG)
2005 Human Factors Journal Club, University of Maryland, School of Nursing

Journal Publications, Peer Reviewed

Nahm, E. S., Vaidya, V., **Ho, D.**, Scharf, B., & Seagull, J. "Outcomes assessment of clinical information system implementation: a practical guide". *Nursing Outlook*, 55(6):282-288. 2007. **(Selected Best Practice Paper of 2007-2008 in Nursing Outlook)**

Dexter, F., Xiao, Y., Dow, A.J., Strader, M.M., **Ho, D.**, Wachtel, R.E. "Coordination of Appointments for Anesthesia Care Outside of Operating Rooms Using an Enterprise-Wide Scheduling System". *Anesthesia & Analgesia*, 105(6):1701-1710. 2007.

Hu, P., Xiao, Y., **Ho, D.**, Mackenzie, C.F., Hu, H., Voigt, R., Martz, D. "Advanced Visualization Platform for Surgical Operating Room Coordination: Distributed Video Board System". *Surgical Innovation*, 13(2):129-135. 2006.

Xiao, Y., Hu, P., Hu, H., **Ho, D.**, Dexter, F., Mackenzie, C.F., Seagull, F.J., Dutton, D. "An Algorithm For Processing Vital Sign Monitoring Data to Remotely Identify Operating Room Occupancy in Real-Time". *Anesthesia & Analgesia*, (101)3:823-829. 2005.

Invited Talks

Ho, D. "Data Management and Information Sharing Strategies to Support Critical Care Discourse: Field Observations and Implications for ICT Design". *Mechanical and Industrial Engineering (MIE)*, University of Toronto, Toronto, Canada. February 28, 2008.

Conference Proceedings, Peer Reviewed

Ho, D., Xiao, Y., Hu, P.F., Vaidya, V., Straumanis, J.P., Cardarelli, M.G., Norcio, A.F., Gurses, A.P. "Front-Stage and Back-Stage Information Processes of Critical Discourse in Intensive Care Settings". In *Extended Abstracts of Computer-Human Interaction (CHI) 2008, Work-in-Progress*, 3033-3038, 2008.

Ho, D., Xiao, Y., Vaidya, V., Hu, P. "Communication and Sense-Making in Intensive Care: An Observation Study of Multi-Disciplinary Rounds to Design Computerized Supporting Tools". *Proceedings of the American Medical Informatics Association Annual Symposium*, Chicago, IL, 329-333. 2007. **(Presenting author)**

Ho, D., Xiao, Y., Gurses, A., Vaidya, V., Cardarelli, M., Tumulty, J., Conway, D., Simone, S., Hu, P., Cervenka, J. "Artifacts Use in Safety Critical Information Transfer: A Preliminary Study of the Information Arena". *Proceedings of Human Factors and Ergonomics 51st Annual Meeting*, 51:343-347. 2007. **(Presenting author)**

Seagull, F.J., **Ho, D.**, Radcliffe, J., Xiao, Y., Hu, P.F., Mackenzie, C.F. "Just-in-time Training for Medical Emergencies: Computer Versus Paper Checklists for a Tracheal Intubation Task". *Proceedings of the Human Factors and Ergonomic Society Annual Conference*, 51:725-729. 2007.

Hu, P.F., Mackenzie, C.F., Gilbert, G.R., Poropatich, R.K., Seebode, S., **Ho, D.**, Story, T., Xiao, Y. "Rapid deployable Video Distribution System (VDS) for real-time disaster management". American Telemedicine Association (ATA) Annual Conference, T4F3. 2007. **(Presenting author)**

Ho, D., Xiao, Y., Seagull, F.J., Sisley, A., Dutton, R., Mackenzie, C.F. "Handbooks or Mentors? The Role of a Resident Physician Manual in Resident Education". Proceedings of Human Factors and Ergonomics 49th Annual Meeting, 1474-1477. 2005. **(Presenting author)**

Ho, D., & Burns, C.M. "Ecological Interface Design in Aviation Domains: Work Domain Analysis of Automated Collision Detection and Avoidance". Proceedings of Human Factors and Ergonomics Society Annual Conference, 47:119-123. 2003. **(Presenting author)**

Abstracts, Peer Reviewed

Dutton, R., **Ho, D.**, Hu, P., Mackenzie, C.F., Xiao, Y. "Decision Making by Operating Room Managers: The Burden of Changes". Anesthesiology, (103):A1175. 2005.

Poster Presentations, Peer Reviewed

Ho, D., Xiao, Y., Sen, A., Cardarelli, M.G., Salim, M.A., Gaskin, P., Straumanis, J.P., Vaidya, V., Tumulty, J., Simone, S., Hu, P., Seebode, S., Kelemen, M. "Development of an Observational Tool on Computer Use During Rounds". American Medical Informatics Association Annual Symposium, Washington DC, S13. 2008.

Ho, D., Hu, P.F., Seebode, S., Mackenzie, C.F., Brooks, T., Handley, C., Hirshon, J.M., Wasylina, P., Johnson, S. "Real-Time Video Review: Data Collection Techniques to Support Situational Awareness". American Telemedicine Association (ATA) Annual Conference, P50. 2007.

Xiao, Y., Hu, P., **Ho, D.**, Vaidya, V., Seebode, S., Cardarelli, M. "A Computing Platform to Support Communication and Sense-Making in Intensive Care". American Medical Informatics Association Annual Symposium, S48. 2007.

Hu, P.F., Mackenzie, C.F., Gilbert, G.R., Poropatich, R.K., Seebode, S., **Ho, D.**, Gagliano, D., Xiao, Y. Real-Time Rapid Deployable Video System (RDVS) for patient tracking and disaster management. 17th World Conference on Disaster Management Conference. Toronto, Canada. 2007.

Ho, D., Hu, P., Carmack, D., Hayda, R., Pohl, A., Dunbar, R., Harris, R., Frisch, H. "Design and Evaluation of International Video Teleconference (iVTC) for Orthopedic Trauma Education". Proceedings of American Medical Informatics Association Annual Symposium, 951. 2006.

Hu, P., **Ho, D.**, Hayda, R.A., Pohl, A., Dunbar, R.P., Harris, R.M., Frisch, H.M., Carmack, D.B. "International Video Teleconference (iVTC): Learning And Sharing In Orthopedic Trauma Care". American Association of Orthopedic Surgeons. 2006 Meeting, P525. 2006.

Hu, P., Mackenzie, C.F., Seebode, S., **Ho, D.**, Gagliano, D., Truong, L., Tang, N., Cullum, W., Gilbert, G.R., Poropatich, R.K. "Fixed and Mobile Video for MASCAL Reception and EOC Awareness". Second Annual Emergency Preparedness Conference: Disaster Readiness on the Home Front. Washington DC, 2006.

Panels & Workshops Conducted

Nahm, E.S., Gugerty, B., **Ho, D.**, Seagull, J., Vaidya, V. "Show Me the Outcomes! Methods to Assess the Effects of Clinical Information Systems (CIS) Implementation". Summer Institute in Nursing Informatics: Breaking the Barriers of Healthcare Informatics Conference. University of Maryland, Baltimore, Maryland. 2005.

Ho, D. "Interface Design Workshop". Four day workshop for Shad Valley Waterloo. Waterloo, Canada. 2003. Webpage: <http://spirellis.com/danny/shad/workshop.html>

Non-Peer Reviewed Conference Presentations

Ho, D. "Ecological Interface Design in Aviation Domains: Improving Pilot Trust in Automated Collision Detection and Avoidance". WATCHI Seminar Series, University of Waterloo, 2003. **(presenting author)**

Non-Peer Reviewed Poster Presentations

Ho, D., Xiao Y., Sen A., Hu P.F., Norcio A.F. "Computerizing the Information Arena: Strategies for Sharing Visual Information Spaces During Multidisciplinary Medical Rounds in Critical Care Settings". Interactive Visual Exploration of Electronic Health Records, A HCIL Symposium Workshop. College Park, MD. 2008.

Ho, D. "Ecological Interface Design in Aviation Domains: Improving Pilot Trust in Automated Collision Detection and Avoidance". CRESTech Innovation Network, Toronto, Canada. 2003

Ho, D. "Ecological Interface Design in Aviation Domains: Improving Pilot Trust in Automated Collision Detection and Avoidance". Xchanging Ideas, Toronto, Canada. 2003

Ho, D. "Work Domain Analysis of TCAS Interface Design". SUNY HF Meeting, Buffalo, NY. 2002.

Technical Reports

Ho, D. "An EID Approach to Examining TCAS II Automation". Human Systems in Systems Design Engineering, Technical Report HSSD-03-02. 2003.

Ho, D., Burns, C.M. "A Review of Experimentation Methodologies in the Area of Aviation Displays and Trust in Automation". Human Systems in Systems Design Engineering, Technical Report HSSD-03-05. 2003.

Masters Thesis

Ho, D. "Improving Pilot Trust in Automated Collision Detection and Avoidance With Ecological Interface Design". *Dissertation*, University of Waterloo, Canada. 2004.

Ph.D. Dissertation

Ho, D. "Towards a Framework for Collaborative Information Exchange: Exploring Effects of Time Pressure and Task Complexity on Cognition Behaviors of Group Information Exchange and Implications for Computer Supported Collaboration in Healthcare". *Dissertation*, UMBC, Baltimore, Maryland. 2011.