

George Stockman

Professor, Department of Computer Science and Engineering, Michigan State University, E. Lansing, MI 48824-1226

Professional Preparation:

Ph.D. Computer Science, University of Maryland, 1977; Dissertation Adviser Laveen Kanal
M.S. Computer Science, Penn State University, 1971
Master of Arts in Teaching, Math Ed, Harvard University, 1967
BS, Math Ed, E. Stroudsburg Univ., PA 1966

Appointments:

Professor (7/90 to present), Assoc. Prof. (9/82 to 6/90), Acting Chair (12/99 to 7/01 and August 2007)
Department of Computer Science and Engineering, Michigan State University
Partner and CIO of ERL,LLC, Lansing, MI, (8/2001 – 12/2004)
Associate Professor (9/79 to 5/82), The American University, Washington, DC
Senior Research Scientist (73 to 82), LNK CORP., Silver Spring, MD
Mathematics Instructor (67-69), Virginia Union University, Richmond, VA

Publications:

1. Five project-related
 - 1) G. Stockman, Object Recognition and Localization via Pose Clustering, Computer Vision Graphics and Image Processing, Vol 40(1987)361-387.
 - 2) L. Shapiro and G. Stockman, Computer Vision, textbook, Prentice-Hall, 2001.
 - 3) D. Colbry and G. Stockman, "Identity Verification via the 3DID Face Alignment System", Proc. Of IEEE WACV 2007, Austin, TX
 - 4) G. Stockman, Object Recognition and Localization via Pose Clustering, Computer Vision Graphics and Image Processing, Vol 40(1987)361-387.
 - 5) R. Raza, G. Stockman, L. Udpa, "Survey of Fusion of RFID and Computer Vision for Recognition and Tracking" in review Apr. 2011.
2. Other
 - a. Unsang Park, Lalitha Udpa, George Stockman, "Motion-based Filtering of magneto-optic imagers", Image and Vision Computing, 22-3(2004).
 - b. V. Bakic and G. Stockman "Menu Selection by Facial Aspect", Proc. Vision Interface '99, Quebec Canada (18-21 May 99).
 - c. G. Stockman, "Object Representation for Recognition by Alignment", in 3D Object Representations in Computer Vision, J. Ponce and M. Herbert(eds), Springer-Verlag(1995).

Synergistic Activities:

- 1) As Associate Chair of the department (2005-2009), Acting Chair (1999-2001), and Graduate Director (1990-1994), familiar with aspects of department academic programs, including recruiting faculty members, instructors, and advising students, scheduling and resourcing courses and laboratories, defining courses, and assessing courses and programs.

- 2) Served as a host for distinguished speakers of the MSU Cognitive Science Program and the MSU Robotics Program, including coordinating visitor programs, pre-talk reading sessions, speaker-student interaction sessions, and hospitality activities.
- 3) Teaching a Computer Vision course at MSU and developing a textbook, problems and projects, and web materials, all public, to support it. Many course graduates have important positions in science and industry. Representing Computer Vision to the Cognitive Science Specialization at MSU.
- 4) Research and software development has resulted in a root measurement system used worldwide by plant and soil scientists and software used to found the small business, ERL,LLC Lansing, to evaluate the design of cars regarding their accommodation to the human body.
- 5) Organizer of several international workshops concerning courses and learning involving computing with images, which dealt primarily with enriching undergraduate education and programming experiences via new courses or integration of image computation into existing courses.
- 6) I am a founding Board member and President of ITEC-Lansing (iteclansing.org), which is organized to increase opportunity in IT and STEM for mid Michigan middle and HS students. MSU and LCC students work with MSU instructors to teach Lego, Scratch, and Gamestar Mechanic programming as after school and summer camp activities.
- 7) I have been involved with the Sloane program in our College (Percy Pierre is PI) and have been active in recruiting and mentoring minority and women graduate students for over 15 years. I have advised two successful women PhD graduates and have been on the committee of several others. Five of my PhD graduates have tenured university positions, and a sixth is up for the tenure decision this year.

Collaborators and other affiliations:

(a) collaborators

Arthur (Ardeshir) Goshtasby, Wright State University
 Frank Biocca, Richard Enbody, Andre Lee, Charles Owen, Alvin Smucker, K.M. Subramanian, Michigan State University; Kevin Bowyer and Patrick Flynn of Notre Dame;
 Herbert Reynolds, ERL,LLC, Lansing, MI
 Jannick Rolland, University of Central Florida
 Neelima Shrikhande, Central Michigan University

(b) Thesis Advisor and Postgraduate Scholar Sponsor

Bruce Flinchbaugh, Texas Instruments, sabbatical sponsor of me
 Laveen Kanal, University of Maryland, PhD advisor
 Linda Shapiro, University of Washington, sabbatical sponsor of me

(c) Recent thesis advisees and postgraduates sponsored:

D. Colbry (PhD 2006) 3D Face ID; Research Assistant Prof., Arizona State Univ.; now MSU HPCC
 S. Minut (PhD 2007) using snakes for object detection, Financial Consultant, Baltimore, MD
 J. Van Voorst (PhD 2010 coadvised) 3D surface-matching and chemical scoring for protein binding
 Neelima Shrikhande, Central Michigan University, sabbatical sponsor

Total number of thesis students: MS (6 completed, 1 current); PhD (14 completed, 1 current); total advised 22. Total postgraduate scholars sponsored: 3