1. Name and Academic Rank

Jeffrey A. Kautzer
Adjunct Professor
Department of Electrical Engineering
College of Engineering & Applied Science
University of Wisconsin-Milwaukee

GEHC Chief Electrical Engineer
GM, Hardware Excellence & Services
GE HealthCare

2. Degrees with fields, institution, and date

M.S. Electrical Engineering, University of Wisconsin – Milwaukee, 1983
B.S. Electrical Engineering, University of Wisconsin – Milwaukee, 1981

3. Service on this faculty: 43 Years, Department of Electrical Eng & Comp Science
Date of original appointment: **Sept, 1981** – Lab Assistant
Dates of advancement in rank: **Sept, 1983** – Lecturer
Sept, 2001 – Senior Lecturer
Jan, 2010 – Adjunct Asst. Professor
Jan, 2021 – Adjunct Professor
Courses Taught: Electronic Design Laboratory, Linear Systems Analysis, Programming, EE595/596/597 Capstone Design – Team based industry environment design project including presentation report. Projects encompass IP, safety, manufacturability, cost, reliability, ethics, industry standards and sustainability.

4. Industrial Experience: 40+ Years Eng Design & Technical Leadership with GE HealthCare

2017 – GM, Imaging Hardware Excellence & Executive Chief Electrical Engineer
Drive global design teams in regulatory certification, reliability, power & ASIC development
Lead global electronics design processes, standards, libraries, tools & technology
2014 – Chief Electrical Engineer, GE Healthcare
Development of electronic technology roadmaps, standards, tools & design processes
2008 – GM, Global Detector Engineering, GE Healthcare
Led global engineering & advanced technology teams in design of advanced tomographic detection subsystems incl ASICs, packaging, interconnects, & scintillators
2003 – Manager, Global CT Detector Engineering, GE Healthcare
Led developments in multi-slice tomographic detectors for medical & baggage scanners
2001 – Manager, Global Xray Detector Engineering, GE Medical Systems
Led key developments incl first flat panel detectors for Cardiac & Angio Xray Systems
2000 - *6 Sigma Master Black Belt Certification*
1999 – Manager, **Xray Detector Hardware Engineering, GE Medical Systems**
Led development of flat panel detector scan and read out ASICs and electronics
1994 – Lead System Design Engineer, GE Medical Systems
Led System Design of first flat panel radiographic system for GEHC
1989 – Chief Engineer, Xray Products Engineering, GE Medical Systems
1985 – Senior Electrical Design Eng, Xray Eng, GE Medical Systems
1983 – Electrical Design Eng, Xray Eng, GE Medical Systems

5. Certifications
1999 – General Electric Medical Systems Six Sigma Green Belt
2000 – General Electric Medical Systems Six Sigma **Master Black Belt**

6. Intellectual Property Contributions: Inventor/Co-inventor of 30 US Patents

US Patent: 4,703,496; Automatic X-ray Image Brightness Control
US Patent: 4,742,424; Power Status Monitor For Electronic System
US Patent: 5,528,264; Wireless Remote Control For Electronic Equipment
US Patent: 5,781,178; Wireless Remote Input For Electronic Equipment
US Patent: 6,149,301; Xray Target Centering Apparatus for Radiographic Imaging Sys
US Patent: 6,256,372; Apparatus and Methods For Stereo Radiography
US Patent: 6,302,580; Apparatus for Solid State Digital Imager Tracking Radiography
US Patent: 6,359,961; Apparatus and Methods for Stereo Radiography Including Remote Control via a Network
US Patent: 6,460,003; Apparatus and Method for Resolution Calibration of Radiographic Images
US Patent: 6,713,769; Method of Sensing Temperature of a Digital Xray Detector
US Patent: 6,798,864; Means of Providing Signal Dependent Offset & Gain Adjustment for Solid State Xray Det
US Patent: 6,946,661; Method and Apparatus for Xray Image Detector Assemblies
US Patent: 6,982,424; Xray and CT Image Detector
US Patent: 6,989,538; Method of Reducing Recovery Time in an Xray Detector
US Patent: 7,091,491; Method and Means for Reducing Electro-Magnetic Noise Induced in Xray Detectors
US Patent: 7,117,588; Method for Assembling Tiled Detectors for Ionizing Radiation based Image Detectors
US Patent: 7,216,423; Mfg Process for Smaller Active Areas in Flat Panel Xray Detectors
US Patent: 7,313,921; Apparatus and Methods for Thermoelectric Cooling
US Patent: 7,330,529; Stationary Tomographic Mammography System
US Patent: 7,617,601; Mfg Process for Smaller Area Flat Panel Xray Detectors
US Patent: 7,974,377; Xray Detection Methods & Apparatus
US Patent: 8,155,265; Asymmetric De-populated Detector for CT & Method of Mfg
US Patent: 8,441,091; Photosensor Assembly & Method for Providing a Photosensor
US Patent: 8,483,352; Stacked Xray Detector Assembly & Method of Mfg
US Patent: 8,483,353; Integrated Xray Detector Assembly & Method of Mfg
US Patent: 8,488,736; Stacked Flat Panel Xray Detector Assembly & Method of Mfg
US Patent: 8,552,466; Low Capacitance Photodiode Element & CT Detector
US Patent: 8,798,229; Detector Modules & Methods of Mfg
US Patent: 9,168,008; Coarsely Segmented Detector Architecture & Method Manufacturing
US Patent: 10,828,003; Method for Mitigating EM Interference When Acquiring Image Data

7. Professional Societies/Activities:

Lecturer: GEHC Advanced Course – Graduate Course accredited by UWM in 2009
Senior Member: IEEE, Institute of Electrical and Electronics Engineers
Reliability Society, EMC Society, Solid State Circuits
Chairman: UW-Milwaukee Electrical Eng Industry Advisory Council, Original Member
Member: SMTA, Surface Mount Technology Association
Member: iNEMI, International Electronics Manufacturer Initiative
Member: Center for Advanced Life Cycle Engineering, Univ of Maryland
GE Liaison: Center for Advanced Computational Imaging, Univ of Wis Milwaukee
Life Member: CCFA, Crohn's and Colitis Foundation of America
Life Member: Tau Beta Pi, Engineering Honor Society
Life Member: UW–Milwaukee Alumni Association

8. Publications/Awards:

2022: General Electric Edison Award
2019: *Characterize and Understand Functional Performance of Cleaning QFN Packages on PCB Assemblies* – Participant & Co-author, iNEMI PCB Cleanliness Research Study
2017: Wisconsin STEM Forward ***Engineer of the Year***
2009: GE Healthcare President's Award
2003: UWM College of Engineering & Applied Science Dean's Award
1999: Wisconsin Governor Award for New Products: Revolution XQ/i Digital Rad System
1999: Radiological Society of North America Publication "Comparison of Low Contrast Detectability Between Digital Amorphous Silicon & Screen Film Based Imaging Systems for Thoracic Radiography"
1996: UWM College of Engineering & Applied Science Alumni Award
1991: UWM Alumni Association Outstanding Young Alumni Award
Electronic Design Laboratory – Handbook of Design, ISBN 0-900-00701-B, EE355 Text
Recipient of 11 General Electric Managerial Service Awards