Internal Faculty Vitae

Andrew J Affrunti Instructor (rev: 01-29-2020)
Andrew J Affrunti Instructor (rev: 01-26-2021)
Andrew J Affrunti Ass't Teach Professor (rev: 01-20-2022)
Andrew J Affrunti Associate Teaching Professor (rev: 09-24-2022)
Andrew J Affrunti Associate Teaching Professor (rev: 01-19-2023)
Andrew J Affrunti Associate Teaching Professor (rev: 01-8-2024)
Andrew J Affrunti Associate Teaching Professor (rev: 01-14-2025)
Andrew J Affrunti Associate Teaching Professor (rev: 01-12-2026)

EDUCATION	M.S.E.E., University of Illinois, Urbana, Spring 1965 B.S.E.E., University of Illinois, Urbana, Spring 1964 PhD course work (incomplete) Illinois Institute of Technology 1965-1967 Northern Illinois University coursework in management 1980 Aurora Community College Cisco Certified Network Associate 1990
ACADEMIC EXPERIENCE	2022 September to present: Associate Teaching Professor. University of Colorado Engineering Partnership Program, Grand Junction, CO. Electrical Engineering Fundamentals, Mechatronics in ME department. Microelectronics, RF and Microwave Lab in ECE department, and Mechatronics for ECE's. 2022 May to present: Senior Instructor/ Associate Teaching Professor 2014 to 2022 May: Assistant Teaching Professor, University of Colorado Engineering Partnership Program, Grand Junction, CO. Electrical Engineering Fundamentals, Microelectronic Circuits, Mechatronics, Electric Power in ME and ECE departments. 2011 to 2014: Adjunct Instructor, University of Colorado ME Partnership Program, Grand Junction, CO. 2011 to 2019: Adjunct Instructor, Colorado Mesa University MET Program Grand Junction, CO. 2009 to 2011: Substitute Teacher District 51 CO K12 2009 to 2011 2008 to 2009: Western Colorado Community College Grand Junction, Adjunct Instructor electrical engineering fundamentals, PLC, and associated laboratories.

NON-ACADEMIC EXPERIENCE	1980-2005: Technical Marketing Semiconductors, Motorola Semiconductor Group. 1965 to 1980: Analog Hardware Design Engineer Motorola, Inc., Military Electronics Center, Aerospace Group. 1966 to present: National Ski Patrol Instructor Outdoor Emergency Care. 1995-1997: National Ski Patrol Instructor Trainer and Rocky Mountain Training Advisor 1980 to 1985: Instructor, Colorado Mountain Club Basic Mountaineering.
PROFESSIONAL REGISTRATIONS	FCC License

SCIENTIFIC AND PROFESSIONAL SOCIETIES OF WHICH A MEMBER	IEEE
HONORS AND AWARDS	Promotion to Senior Instructor CEAG 2022 Lifetime Membership Award fifty-two years of service from National Ski Patrol Forty Years' Service Award from Motorola Forty Years' Service Award from National Ski Patrol Yellow Merit Star Emergency First Aid rendered from National Ski Patrol AT&T-Motorola first successful JIT program from Motorola Avaya-Motorola VoIP DSP Program JPL-Motorola Mariner 71 Flight Subsystem
INSTITUTIONAL AND PROFESSIONAL SERVICE IN LAST FIVE YEARS	Industry Advisory Committee (IAC) to ME, MET, ECE, and CE programs between CU and CMU Prior, Aurora Community College Computer Advisory Board
PRINCIPAL PUBLICATIONS OF LAST FIVE YEARS	None during retirement. Prior, Planning, Executing and Maintaining a JIT Program. Prior, Forced Ranking: A Counterproductive Approach to Performance Appraisal. Prior, AN/PRC-68 Marine Corps concealed antenna VHF Radio User's Manual, Theory of Operation and Alignment. Prior, Starlight 48 Channel UHF Point-to-Point Transceiver Noise Measurements, Group Delay Distortion and Alignment.

PROFESSIONAL DEVELOPMENT ACTIVITIES IN LAST FIVE YEARS	New material and experiments in Mechatronics. MCEN4228. New laboratory experiments. ECEN3250. Webinars/Tutorials FMCW 65 GHz radar. ECEN4634. Webinars/Tutorials Software Defined Radio (Michael Ossmann). ECEN4634. Tutorials GNU Radio Companion (sftwr used with SDR hrdwr). ECEN4634. Balun tutorials (pertaining to interface with balanced antennas). ECEN4634. Improved content, delivery, assessment ECEN3250 Microelectronic Circuits. Webinars and uTube: Transmission lines, scattering parameters, Smith Chart, heterodyning, super heterodyning radio, propagation, antennas, frequency allocation, and related RF topics to be included in course. Course development for elective RF and Microwave Lab; ECE 4634 Mentoring new hires in ME and ECE departments. Participating in curriculum committees. Expansion into Radio Frequency propagation and circuit design. Search committee for one CMU and two CU hires in ECE Partnership program. Instructor, ECEN3250 Microelectronics. New experiments in MCEN4228 Mechatronics. NI Webinar, Communications Education from AM to Spread Spectrum (4/4/19). NXP Webinar, Software Security, Enhance Performance and Implement Machine Learning; 3 part seminar (May2019). Discrete Control System lectures; 6 approximately half hour sessions. Control Systems video lectures; 26 approximately half hour sessions. National Instruments LabVIEW Webinars: 1) Temperature, 2) Volts, Current, Power, 3) Strain, 4) Sound and Vibration, 5) Load Pressure and Torque MATLAB Seminar: Integrated Curricula with MATLAB and SimuLink Motivating First-year students. (2018) Creation of numerous laboratory experiments to complement newly introduced Mechatronics course. New course creation and execution; Introduction to Mechatronics, lecture and laboratory. National Instrument 16 hour LabVIEW certification course. New course creation and execution; Electric Power Engineering, lecture and laboratory. National Instrument 40 hour course LabVIEW. Siemens Programmable Logic Controller 40 hour course. Honing teaching skills in Western Colorado Community College, District 51 K12 and University of Colorado – Colorado Mesa University ME Partnership Program. Prior, Cisco Certified Network Associate. Prior, Six Sigma Prior, Program Management Prior, Target Account Selling Prior, Numerous courses from Motorola University, Northern Illinois University and Illinois Institute of Technology