In less than 8 years, an initially modest partnership between the Electrical and Computer Engineering Department (ECE) at the University of Puerto Rico at Mayagüez (UPRM) and Texas Instruments, Inc. (TI), evolved into a well rounded learning program supporting undergraduate and graduate research, curriculum development, laboratory activities, and Coop experience for undergraduate and graduate students with the company for periods of up to eight months. The birth of this collaboration was facilitated by the previous ties created under the umbrella of the Industrial Affiliates Program which, for the last 14 years, has being channelling the sponsorship of a number of internationally renowned companies to support undergraduate research projects. Participating students have acquired further tools to develop their technical background in a professional environment, as well as to improving their communication skills and bolstering their self-confidence. Many students have also found motivation to attend graduate school. Employers have experienced high student retention rates, measured in terms of the number of participants who become full-time employees after graduation. The program also has contributed to raising the quality of education offered at the ECE department by fostering the creation of new, up-to-date courses and attracting donations for the creation of a new laboratory.

This paper describes the UPRM-TI and the IAP programs, presents statistics quantifying their achievement, and identifies key elements for the implementation of successful industry-sponsored practical learning experiences