

DIVISION OF ENGINEERING AND INFORMATION TECHNOLOGIES

FACULTY AND STAFF PROFILES

Fayez Saleh, Deputy Chairperson

Mr. Saleh brings nearly 30 years experience with MTA-New York City Transit in car equipment, engineering, management, construction, and operations. He has been an instructor at TCI for more than 10 years. Besides instructing Railway courses, he also instructs classes in Mechatronics and Mathematics, indicative of his diverse knowledge and abilities. He holds an M.E. Degree from City College of New York, and an MS from SUNY Maritime College.

Mohamed Abdelsattar, Lecturer

Mr. Mohamed has 15 years experience with new technology trains and quality assurance at MTA-NYC Transit, plus additional experience in electrical engineering and communications. He has taught at TCI for more than 10 years. He holds an M.S. degree in civil engineering from City College of New York.

Nathan Maxemous, PE, Lecturer

Mr. Maxemous is a member of Electrical Engineers Communications Association and the IEEE. He has over 30 years experience in electrical and communications engineering design including 14 years experience at MTA-NYC Transit, Electrical Engineering Department. He holds a B.E. degree from Assuit University. He has taught at TCI for more than five years.

Pradeep Kumar, Lecturer

Mr. Pradeep brings 20 years experience with MTA-NYC Transit in Operations, Management and New Technology Trains. He holds an M.S. degree in Computer Science from Pace University. Besides instructing Railway courses, he also instructs classes in Mathematics and Business, indicative of his diverse knowledge and abilities. . He has taught at TCI for more than 5 years.

Joseph Cunningham, Lecturer

Mr. Cunningham has 35 years experience researching railway and electrical technology, and is the author of seven railroad books and numerous articles. He has served as a consultant to authors in both the US and the UK, and lectured at New York Transit Museum, Institute of Electrical and Electronics Engineers, and New York Public Library. He holds a B.S. in physics from St. Francis College. He has taught at TCI for more than 5 years.

Juan Jimenez, Lecturer

Mr. Jimenez has 16 years experience with MTA-NYC Transit Signal Department; plus additional experience in power and communications. He holds an M.S. degree in electrical engineering from City College of New York. He has taught at TCI for more than 5 years.

Andrew J. Sparberg, Director

Mr. Sparberg has been TCI's Railway program director since 2007. Prior to that, he spent 33 years working in transportation planning and operations in the New York metro area, including 25 years with MTA- Long Island Rail Road. He holds an MS-Urban Planning degree from Pratt Institute and an MPA degree from New York University. He has lectured at New York Transit Museum, the 92nd Street YM-YWHA, and at New York State Historical Association.

Vincent Zablocki

I am constantly involved in the hobby of model railroading. For over 35 years I have been building, detailing, custom painting and doing electronic decoder installations on model trains. For the last 20 years, I have been contracted by many people to perform those jobs as well. Model railroading is a hobby where you try to build and recreate what is done on the prototype railroads. Actual photos are researched of the equipment and the parts are out there in miniature to do the job. It takes a fine hand and eye to do the work. Hopefully, mine will keep working for another 35 years. The electronics side involves lots of wiring and soldering. Lighting can be done using miniature 1.5 volt bulbs or LED's. Decoder circuits are installed into every locomotive to permit digital control of the train. No more transformers like 20 years ago (although some people still do operate their trains with them). Computers can be used to program the locos. They can also be used to do signaling and dispatching, just like the real railroads do.

Thomas E. Fennell Jr.

Bachelors in Electrical Engineering from Manhattan College, Class of 62. Worked for the New York Telephone Company for 30 years (1962-1992) as a Telecommunications Engineer. This time also included two years (1963-1965) in Military Services mainly in U. S. Army Map Service. He holds a Masters in Electrical Engineering from New York University, Class of 1969. Received the New York State Professional Engineers License in 1969. Instructor at TCI since 1993, teaching mainly Mathematics and Basic Electronics.

Miguel Bustamante Ph.D.

Dr. Miguel Bustamante has a Ph.D from CUNY/Graduate Center in Electrical Engineering Remote Sensing. For the past five years he has been doing research at The City College of New York on a geographically distributed sensor system for the study of atmospheric aerosols. Aerosols or suspended particulates are of great importance because of their effect on the Earth's climate and also on human health (air pollution). NASA and the City College (NOAA-CREST) group have constructed a radiometer sensor network to detect ground level solar radiance as a function of wavelength for the study of aerosols types and concentrations. The networked devices are deployed in New York Metropolitan area, both locally and regionally (up to 60 km). Each site collects data and relays it to a data server at CCNY which compiles, analyzes and archives the data from the site. Currently there are five active sites with plans to expand to twelve sites.

Dr. Bustamante also has fourteen years of teaching experience. Dr. Bustamante is currently teaching at Technical Career Institutes (TCI) and CityTech (adjunct Faculty August 2010). At TCI he held the position of Chairperson of the Technology Department from 2002 through 2004. Dr. Bustamante has taught many courses from computer programming to networks, including microcomputers and digital logic. Dr. Bustamante is currently the Deputy Chair of the Industrial Electronics and Electronic Security System in the Division of Engineering and Information Technology.

Alberto Aponte, Ph. D.

25 years of Educational experience with several Colleges and Universities in USA as well as in Colombia. He holds a B. E. in Electronics Engineering from “Universidad de Antioquia” in Colombia, an M. E. in Electrical Engineering from CUNY, an M. S. in Electrical Engineering from CUNY, and a Ph. D. in Electrical Engineering (Wireless Networks) from CUNY. He also holds a Certification in Computer Networks from Columbia University. He has taught at TCI since 1991, he is currently the Chairman of the NET/IETC/ESS programs, and the Coordinator of the IEEE Chapter at TCI.

Marcelo L. Oscar

Mr. Oscar has been an Instructor in the Division of Engineering and Information Technologies for almost 20 years. He is a graduate of TCI and also has a B.S. in Biomedical Engineering from Marquette University. As an Instructor, Mr. Oscar has taught a wide range of courses at the introductory, intermediate, and advanced level in the fields of electronics, mathematics, and computer technology.

Roy Lau

Mr. Lau was the Deputy Chairperson and then the Chairperson of the IETC, IETR, NET and ESS Department for 10+ years. He has attained a spectrum of 30+ certifications and licenses spanning across engineering, project management, electronics, computers, networking, database, and information technology. Since 1998 he has been successfully orchestrating faculty efforts in getting hundreds of students certified in A+, Network+, Security+, MCP, MCTS, CETa, CCNA, etc. He is the founder and advisor of the populous ITCert+ Club and the Robotics Club, and recently the Success Club. He is known for developing innovative approaches and providing creative solutions in pedagogy and instructional methodologies. He has 10+ years of business experience and 15+ years of experience in a variety of industries including engineering, security, and consulting. He regularly updates his experience with sabbaticals and summer internships in the electronics security and the networking industries.