

Charles E. Burger

Objective Master principles of engineering systems, particularly in hardware and interface design; striving to enhance people skills and leadership abilities.

Experience **BAE Systems Controls, Johnson City, NY, 2007-2008**
GE38 FADEC, Lead Systems Engineer – Developed Full Authority Digital Engine Control (FADEC) for new GE38 engine, based loosely on existing product. Program key goals are high-volume, low-cost, fast turnaround product. Responsible for requirements management, program planning, resource and test schedules, weekly earned value reporting, risk identification and mitigation, and budget management of over 25 cost accounts. Worked with team to manage and write hardware and software requirements documents, as well as interface documents between hardware, software, and customer engineering team. Familiar with Design Verification Testing, Design Assurance Testing, and Qualification Testing.

FADEC IR&D, Lead Systems Engineer - Worked developing new bus protocols for RapidIO and FlexRay technologies to be used in aerospace computing. Assisted in managing company interests in industry's AVSI group. Worked regularly with international partner on new addressable interfaces. Reported weekly progress (budget and schedule) for systems engineering team.

Rockwell Collins Simulation and Training Solutions, Binghamton, NY, 2003-2007
Lead Electrical Engineer – Designed and directed build of Stryker and CH-148 maintenance simulation trainers. Included requirements analysis, systems engineering and design, hardware-software integration, network design, computer system design, safety engineering, and facility design. Consistently had direct interface with customers (US Army, Canadian DND) on various aspects of the trainer, from requirements capture to acceptance testing and installation. Built or modified all electrical interfaces on trainer, including controls for pneumatics, hydraulics, aural training cues, engine electronics, weaponry, and diagnostic equipment. Also led design for flight controls interface for CH-148 flight simulator.

Education **Bachelor of Science, Electrical Engineering Technology**
SUNY Institute of Technology, Utica, NY, May 2003
Emphasis: Control Systems, Microprocessors, and Programming.
GPA: 3.76, Graduated Cum Laude

President, IEEE SUNY IT Student Chapter 2002-2003 Academic Year
IEEE Micromouse (extracurricular) – Created award-winning autonomous robot two consecutive years. Using PIC microprocessor, developed a system of tracking and decision making. Developed hardware and low-level software.

Associate in Applied Science, Electrical Engineering Technology
Broome Community College, Binghamton, NY, May 2001
Emphasis: Power Electronics, Electronic devices and circuits, Design and Fab. Process
GPA: 3.6 Dean's List, President's List

Honors Nominated for Rockwell Collins Engineer of the Year Award
SUNY IT Presidents Medallion (awarded for excellence in leadership and integrity)
Tau Alpha Pi Honor Society
The Louis Galbiati Tau Alpha Pi Award

Skills **Microprocessors:** Computer Architecture, Microprocessor Architecture, Microprogramming
Digital Electronics: Serial Communications (RS-232, RS-422, RS-485, FlexRay, RapidIO), Logic Circuits
Tools: Fusion Splicer, Logic Analyzers, Multimeters, Oscilloscopes, Spectrum Analyzers, Time-Domain Reflectometers (TDR)
Programming: Basic, C, CSS, C++, and RS Logix, HTML, PHP, MySQL, and Flash
Computer: AutoCAD, DOORS, Networks, PC Repair & Maintenance, Promis•E Level I, Website Development
Other: Familiar with CMMI, Circuit Design and Test, Product and Service Sales, Utility Pole Use, First Aid and CPR (certification now expired)