

# THOMAS M. PITERA

tpitera@stevens.edu

**OBJECTIVE:** Full-time position in the Electrical Engineering field in the area of research and development with an interest in embedded microprocessor hardware, digital/analog control, and/or electromagnetic propulsion.

**EDUCATION:** **Stevens Institute of Technology**, Hoboken, New Jersey  
Bachelor of Engineering in Electrical Engineering, Expected May 2004  
Minor: Computer Science  
GPA: 3.64, Dean's List

**COURSES:** Electronic Circuits, Circuits and Systems, Microprocessor Systems, Electromagnetism, Control Systems, Switching Theory and Digital Design, Digital System Design, Transport Phenomena, Digital Signal Processing, Introduction to Communication Systems, System Dynamics, Modeling and Simulation, Thermodynamics and Energy Conversion, and Engineering Design

**SKILLS:** **Hardware:** PC-based systems  
**Software:** Windows 9x/2000/XP, MS Office 2000/XP, OrCAD PSpice 9.1, CircuitMaker 2000, Multisim 2001, AutoCAD 2000, SolidWorks 99, MathCAD 8, LabVIEW 5.0.1, and MATLAB 5.3  
**Languages:** C++, Pascal, QBASIC, VHDL, M68HC11 Assembly, G, and PLC Ladder Logic  
**Laboratory Skills:** Precision soldering, Wiring, Drafting, Schematic interpretation/analysis, and Metalwork

**EXPERIENCE:** **Schindler Elevator**, Randolph, New Jersey  
Senior R&D Engineering Co-op: 9/02-1/03, 5/03-8/03

- Developed a dynamometer monitoring application for a simulation environment using LabVIEW
- Researched and evaluated lightning suppressors for an elevator drive according to required code using a transient impulse generator and high voltage probe
- Devised new isolation mounting technique for contactors in control cabinet; submitted a Patent Disclosure for invention

R&D Engineering Co-op: 1/02-5/02

- Retrofitted and tested prototype embedded microprocessor components for an elevator network system using oscilloscopes, multimeters, and LONWORKS debugging tools
- Designed PLC test systems to life-test new and existing products and simulate elevator commands using WindLDR ladder logic
- Assessed and updated design for existing door control board using standard test equipment

**Lambda-EMI**, Neptune, New Jersey  
R&D Engineering Co-op: 5/01-8/01

- Developed and assembled prototype components for DC switching mode power supplies with engineers
- Tested new design for control board and inverter; prepared reports on performance analysis and results
- Evaluated product competition of acquired products by means of physical inspection and standard test procedures; discussed design improvements with engineering and marketing

Test Engineering Co-op: 5/00-1/01

- Designed and constructed manufacturing test apparatus; implemented a 40kW programmable load bank
- Repaired and modified existing test fixtures and documented alterations
- Established updated test procedures with input from engineers and assembly workers

**ACTIVITIES:** Eta Kappa Nu National Honor Society, Cooperative Education

**HOBBIES:** Model Trains, Nitro RC Cars, Home Improvement, Computers, Tennis, and Golf

US Citizen