

**The University of Iowa College of Engineering  
Student Development Center/Engineering Professional Development**

**ECE Co-op/Internship Employers  
Locations and Descriptions, 2002-06**

**3M** Austin, Texas  
Engineering Intern/Optical Components Program

**3M** St. Paul, Minnesota  
Software engineering, designing and debugging user interface, troubleshooting

**Alcoa** Bettendorf, Iowa  
Area project work, maintenance driven improvements to production line and safety improvements

**American Profol** Cedar Rapids, Iowa  
Plastic film coatings manufacturer, projects included obtaining a quote for the design, fabrication, and installation for a new transfer and conveying system for plastic resin from railcar to storage silo and finally to production line, other plant engineering capital projects include upgrading corona station, modifying steam hood, and serving as leader of 'Cost Team' from engineering and accounting to identify cost saving initiatives

**Cargill** Cedar Rapids, Iowa  
Provide knowledge and advice to maximize use of electronics in plant processes

**Caterpillar** Peoria, Illinois  
Testing electrical systems for truck-type tractors

**Cerner Corporation** Kansas City, Missouri  
Software development and implementation in health care industry

**ESCO Group** Marion, Iowa  
Power transmission and generation consulting, instrumentation and controls

**Federal Aviation Administration** Washington, DC  
Develop Electro-Magnetic Interference (EMI) test plan for newly acquired Instrument Landing System (ILS)

**Fauske and Associates** Burr Ridge, Illinois  
Software development for nuclear industry and electronic component design/test

**Federal Mogul Ignition Products** Burlington, Iowa  
Drawing electrical wiring diagrams on AutoCAD for use by electricians when troubleshooting plant equipment

**Fermi National Accelerator Laboratory** Batavia, Illinois  
Intern/Networking Group of the Beams Division

**GE Global Research Center** Niskaya, New York  
Develop Bayesian model-based vessel junction detection algorithm to increase accuracy of lung nodule detection CAD system

**Guardian Automotive** Morehead, Kentucky  
Process monitoring to map defects and document manufacturing parameters

**HDL, Inc** San Jose, California  
Associate Software Support Engineer/work with to develop model checking software

**Hamilton-Sundstrand** Rockford, Illinois  
Assist with the design and analysis of a regional jet aircraft electric power system, perform analysis  
Required for completion of electric system architecture design

**Hancher Auditorium** Iowa City, Iowa  
Assistant working on sound projects relating to shows, events, and other performances

**Harrison Steel Casting** Attica, Indiana  
Development of Furnace Department Training, initiation of project in furnace department

**Hewlett Packard** Corvallis, Oregon  
Assist engineers with program testing and projects

**IBM** Rochester, Minnesota  
Hardware design, working on programming in Verilog to design a floating point unit processor, Perl script and other testing for new server manufacturing test and control programs

**IC-Media Corporation** Mesa, Arizona  
Digital integrated circuit design

**Intermec** Cedar Rapids, Iowa  
Develop automated test programs in Visual C++ for FROD readers

**John Deere and Company, Inc.** Moline, Illinois  
Design of the electric transmission control for prototype vehicle

**John Deere Product Engineering Center** Waterloo, Iowa  
Upgrade existing desktop tools used for tractor network analysis and design, build, and test a desktop simulator for system-level testing of released software assemblies

**John Deere World Wide Development**

Silvis, Illinois

Engineering Intern with Cab & Electrical team, responsible for world-wide design, development and validation of electrical systems, components, sensors, and software for harvesting vehicles, responsibilities included working with experienced software and hardware engineers to develop/test embedded software for vehicle systems and sub-systems, executing product verification and validation activities for sensors, actuators, controllers and software

**Johnson Controls**

Cedar Rapids, Iowa

Engineering Co-op/environmental systems and controls

**Lightpointe Communications**

San Diego, California

Circuit card assembly design, testing, and documentation/software development

**Lightwaves Systems**

Cedar Rapids, Iowa

Research and development of software tools for communications industry

**Maytag-Amana**

Amana, Iowa

Built, repaired, and programmed control boards, learned Perl and wrote tools for other projects, designed and built process management/training website, provided advanced research into possible integration with products

**Mid-American Energy**

Cedar Rapids, Iowa

Power transmission engineering

**Motorola**

Schaumburg, Illinois

Engineering internship in Radio Systems Division

**NEC USA**

Princeton, New Jersey

Design built in self test circuit for delay fault

**National Instruments**

Austin, Texas

High speed sources programming, create test suite of 50 cases, design of expandable and modular architecture

**Northrup Grumman**

Rolling Meadows, Illinois

Support for the administration of engineering and other computing systems, exercise and update disaster recovery plans, implementation of six sigma process improvement projects

**Omaha Public Power**

Nebraska City, Nebraska

Various engineering projects for power generation at public utility

**Procter and Gamble**

Iowa City, Iowa

Manufacturing controls and systems projects

<b>Rockwell Collins, Inc.</b>	Cedar Rapids, Iowa
Various projects involving hardware/software development and testing, image analysis, and web development for aircraft and internal applications	
<b>Rockwell Collins</b>	Coralville, Iowa
Manufacturing Electrical Engineer Intern, pull data, analyze and make changes to keep production moving and more efficient, getting the data ready for the monthly and weekly Failure Review Board (FRB)	
<b>Seagate Technologies</b>	Minneapolis, Minnesota
Engineering Intern on Transducer Development Team of hard disc drive manufacturer, mapping material properties of various compositions of alloy for evaluation of alternative, more efficient, compositions	
<b>Siemens Medical Solutions</b>	Malvern, Pennsylvania
Basic and applied research in medical imaging	
<b>UI College of Engineering</b>	Iowa City, Iowa
Laboratory Assistant/dental simulator project/analyzing and testing results	
<b>UI Department of Physics</b>	Iowa City, Iowa
Computer Systems and support	
<b>UI Department of Psychiatry</b>	Iowa City, Iowa
Computer support/software	
<b>UI College of Engineering CLOG/CBCB</b>	Iowa City, Iowa
Daily processing of sequence data, auditing of status webpages, submission of data to public databases	
<b>UI College of Engineering GROK Lab</b>	Iowa City, Iowa
Program microcontroller for robot servo motor control	
<b>UI College of Engineering Human Factors Lab</b>	Iowa City, Iowa
Design software and hardware for instrumented vehicle as part of a human factors research study	
<b>UI College of Engineering IATL</b>	Iowa City, Iowa
Program a microchip dsPIC to interface with 802.15.4 radio, perform experiments and analyze results	
<b>UI Design and Construction Services</b>	Iowa City, Iowa
Engineering projects oversight, inspections, quality assurance and compliance	
<b>UIHC Neurology</b>	Iowa City, Iowa
Radiological research and studies	

**University of California at Los Angeles/REU**  
Develop a webpage interface for existing CENS tools

Los Angeles, California

**University of California at Santa Clara/REU**  
REU Program: test and evaluate high speed and high accuracy A/D Converters for astronomy grade CCD controller system

Santa Clara, California

**USAF ROTC National Internship**  
Design and manufacture reusable frame to wrap carbon fiber

Kirtland AFB, New Mexico

**Utah State University Space Dynamics Laboratory/REU**  
Participating in EE work on EWINDS project

North Logan, Utah

**Vital Images, Inc.**  
Responsible for design, code, test and documentation of imaging software

Plymouth, Minnesota