

## ***Engineering Recruiting Consortium 2009***

To apply visit <http://www.swarthmore.edu/careerservices.xml> and click on the feature in the top right corner.

Then follow the instructions specific to Swarthmore students.

### **Activision, Inc. - Engineering Summer Internship**

Headquartered in Santa Monica, California, Activision, Inc. is a leading worldwide developer, publisher and distributor of interactive entertainment and leisure products. Activision maintains operations in the U.S., Canada, the United Kingdom, France, Germany, Ireland, Italy, Sweden, Spain, the Netherlands, Australia, Japan and South Korea.

Activision Blizzard is seeking talented engineers to join its Central Technology division on a summer internship or co-op basis. This is a rare East Coast opportunity to develop cutting edge games technology, learn the next-gen consoles inside and out, and to work with top developers like Treyarch, Neversoft, Infinity Ward, Raven, Bizarre Creations, and Vicarious Visions. This past summer interns worked on problems such as multi-core job systems, vertex and fragment shader optimization, and GPU command-buffer generation.

Successful candidates will demonstrate superior programming and problem-solving skills, and will be self motivated and reliable.

Qualifications:

- Working knowledge of C++
- Experience with at least one game-related domain such as graphics, networking, embedded systems
- Multi-threading, optimization, and/or artificial intelligence algorithms are a plus
- Practical facility in a language such as Perl or Python is helpful
- Students must be enrolled in a 4 year college/university program

This position is in Portland, Maine.

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### **Cannon Design - Mechanical Engineering - Full Time**

Cannon Design is an Ideas Based Practice, ranked among the leading international firms in planning and design for healthcare, science & technology, education, sports & recreation and government clients. At present, the firm employs a staff of 800, delivering services in 17 offices throughout North America, as well as abroad in Shanghai, China, and Mumbai, India.

Recognized for design excellence and technological innovation, and known for performance and dedication to client service, Cannon Design's 'single firm, multi-office' practice approach enables the firm to focus the resources of its staff through a network of seventeen regional offices. By assembling all disciplines within the organization, a committed

team of architects, engineers, planners and interior designers offers clients a single point of responsibility and accountability, ensuring each project's success.

Cannon Design strives to create environments that are a thoughtful response to the program mission, physical setting and functional purpose, reflecting the spirit and personality of each owner. The firm is focused on quality with client satisfaction as the ultimate measurement. Cannon Design works continuously to advance the state of the art, contributing to the built environment and quality of life of the people for whom it creates living and working spaces.

**Mechanical Engineering** position is excellent for anyone wanting to experience all aspects of an engineering design firm-opportunity to be exposed to electrical, mechanical, and architectural functions. Will work under the supervision of Senior Engineers to design and layout mechanical engineering systems. Perform AutoCAD production of design drawings using corporate technical standards and references. Strong communication, teamwork and presentation skills required. Minimum 0-3 yrs experience. AutoCAD, Microsoft Excel, Microsoft Word, Microsoft Access required.

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**Cannon Design - Mechanical Engineering – Internship**

(see above for company description)

Position is excellent for anyone wanting to experience all aspects of an engineering design firm-opportunity to be exposed to electrical, mechanical, and architectural functions. Will work under the supervision of Senior Engineers to design and layout mechanical engineering systems. Perform AutoCAD production of design drawings using corporate technical standards and references. Strong communication, teamwork and presentation skills required. AutoCAD, Microsoft Excel, Microsoft Word, Microsoft Access required.

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**Cannon Design - Commissioning - Full time**

Position is excellent for anyone wanting to experience all aspects of an engineering design firm. Opportunity to be exposed to electrical, mechanical, and architectural functions. Will work under the supervision of Senior Commissioners to compare the actual performance of various building systems against the original design. Experience in commissioning, energy calculations, spreadsheet data analysis, and/or the LEED rating system. HVAC design, Electrical design, or construction field experience a plus. Strong communication, teamwork and presentation skills required. Minimum 0-3 yrs experience. Microsoft Excel, Microsoft Word, Microsoft Access required.

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**Cannon Design - Commissioning – Internship**

(see above for company description)

Position is excellent for anyone wanting to experience all aspects of an engineering design firm. Opportunity to be exposed to electrical, mechanical, and architectural functions. Will work under the supervision of Senior Commissioners to compare the actual performance of various building systems against the original design. Experience in commissioning, energy calculations, spreadsheet data analysis, and/or the LEED rating system. HVAC design, Electrical design, or construction field experience a plus. Strong communication, teamwork and presentation skills required. Microsoft Excel, Microsoft Word, Microsoft Access required.

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**Cannon Design - Electrical Engineering - Full time**

(see above for company description)

Position is excellent for anyone wanting to experience all aspects of an engineering design firm. Opportunity to be exposed to electrical, mechanical, and architectural functions. Will work under the supervision of Senior Engineers to design and layout electrical engineering systems. Perform AutoCAD production of design drawings using corporate technical standards and references for power distribution systems (through 35KV), emergency power generation and distribution, lighting systems, fire/security systems, and telecommunications. Strong communication, teamwork and presentation skills required. Minimum 0-3 years experience, AutoCAD, Microsoft Excel, Microsoft Word, Microsoft Access required.

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**Cannon Design - Electrical Engineering – Internship**

(see above for company description)

Position is excellent for anyone wanting to experience all aspects of an engineering design firm. Opportunity to be exposed to electrical, mechanical, and architectural functions. Will work under the supervision of Senior Engineers to design and layout electrical engineering systems. Perform AutoCAD production of design drawings using corporate technical standards and references for power distribution systems (through 35KV), emergency power generation and distribution, lighting systems, fire/security systems, and telecommunications. Strong communication, teamwork and presentation skills required. AutoCAD, Microsoft Excel, Microsoft Word, Microsoft Access required.

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**DataViz, Inc. - Software Engineer - Full time**

DataViz is an industry leader in developing and marketing Office compatibility and productivity solutions across a variety of platforms including Palm OS, Symbian OS,

BlackBerry, Java, Linux, Windows Mobile, Windows and Macintosh. Founded in 1984, DataViz began its business developing file conversion software and has since expanded its expertise to providing solutions that meet the increasing demands of the handheld and mobile markets. With enterprise-grade solutions that include its award-winning mobile Office suite, Documents To Go, and wireless Microsoft Exchange ActiveSync client, RoadSync, DataViz is committed to providing premium solutions that mobilize 'Microsoft Office' without compromise and provide customers with instant access to critical files and business data.

Work with cutting edge mobile technology and get paid for it!  
DataViz Inc., located in Milford, CT, is looking for talented & motivated software developers interested in producing award-winning consumer software for some of the most cutting-edge smartphones and mobile devices on the market. Developers will be working with a variety of phones and devices, due to DataViz's strategic partnerships with large international companies such as Microsoft, Motorola, Palm, RIM, and Sony Ericsson. Many times, our developers find themselves working with next generation phones long before they are available to the public. DataViz provides many opportunities to grow and develop professionally. Software engineers are expected to be involved in all aspects of consumer software development, from requirements, design and implementation, right through testing and bug fixing. You will be given the chance, and are expected, to become proficient with multiple applications (Documents To Go, RoadSync) on multiple platforms (Blackberry, Palm, Symbian, Windows Mobile), with multiple programming languages (C++, Java). Project teams change on a regular basis in an effort to keep things fresh, dynamic, and exciting!

As a new engineer, you will be expected to contribute from day one. When we hire, we hire the best, and new developers get the opportunity to work among very intelligent and accomplished software engineers who are always ready and willing to help others grow and learn. The work can be challenging, but working through these challenges is very rewarding. If you are interested in contributing to an exciting, casual, team-oriented environment, instead of being stuck in a cubicle farm, this may be the job for you.

If you are a talented programmer interested in joining a small company where you will work with the latest technologies and get an opportunity to make an impact from day one, this is definitely the job for you.

Experience:

This is an entry-level Software Engineer position.

Requirements:

- Excellent problem solving skills
- Demonstrated passion for software development
- Strong desire to learn and grow professionally
- 3.0 or higher GPA
- Java and/or C++ experience is a plus

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**FactSet Research Systems – Software Engineers - full time**

FactSet has ranked as one of BusinessWeek's Best Places to Launch a Career. FactSet offers instant access to accurate financial data and analytics to thousands of investment

professionals around the world. Our company combines hundreds of databases from industry-leading suppliers and clients' own proprietary data into a single, powerful information system, making FactSet a one-stop source for financial information. We're dedicated to staying on the cutting edge of technology by continually developing and refining our own software.

FactSet has the growth and opportunity of a start-up with the stability of a well established company. FactSet continues to maintain operations without any debt and has posted double-digit earnings increases for each quarter of the last twelve years. Thanks to our rapid growth, employees are given immediate responsibility and new opportunities for advancement. FactSet's management encourages and rewards entrepreneurial efforts, another factor that contributes to FactSet's success.

The environment at FactSet is one of friendly cooperation. Our employee retention rate has historically averaged 90 percent because employees are treated well and opportunities abound.

With headquarters in Norwalk, Connecticut, FactSet employs more than 2,400 people in 23 locations. The company generates over \$575 million in annual revenues and, since 1996, trades publicly on the New York Stock Exchange under the symbol FDS.

FactSet Software Engineers are self-motivated, articulate, highly-skilled professionals. They design and implement applications, databases, and systems, having responsibility for all phases of development. Software Engineers work closely with other departments to ensure that FactSet's products and technologies are extremely responsive to the changing needs of the investment community.

FactSet's hands-off management style encourages developers to take initiative to complete projects, manage multiple tasks, and set their own day-to-day priorities. Following training, the Software Engineer has immediate opportunities for creative software development. Whether it's enhancing existing systems or creating groundbreaking new facets to the service, FactSet engineers continually contribute to the success of the company.

Requirements:

- BS or MS degree in Computer Science (or equivalent)
- Desire to both design and implement superior software
- Experience programming in C++ or an OOP language

Desirable experience in any of the following focus areas:

- Strong C++ programming skills
- Win32, MFC, and Visual Studio, COM, ATL
- Excellent understanding of OS, kernel and CPU architectures
- C/C++ generic programming, including STL, boost
- Windows, Unix or VMS system programming environments
- Low level network programming (Threads, Sockets, etc.)
- GUI and event-driven programming

- Working with and managing a large code base
- Programming in a multi-threaded, distributed environment

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**GE Energy - Smart Grid Meter Test Engineer - full time - December grads only**

Why join one great company when you can join many? When you join GE, you join a company made up of 5 exciting businesses. Experience personal growth and competency development as part of the GE team. GE's Energy Infrastructure segment is leading the field in the development, implementation and improvement of the products and technologies that harness our resources such as wind, oil, gas and water.

GE Energy is one of the world's leading suppliers of power generation and energy delivery technologies in all areas of the energy industry including coal, oil, natural gas and nuclear energy as well as with renewable resources such as water, wind, solar and alternative fuels.[www.ge-energy.com](http://www.ge-energy.com)

The GE (T&D) Transmission and Distribution Engineering team is responsible for design, sustaining and issue resolution of T&D product line for sub-station automation, smart meters, and transformer monitoring and diagnostics. The Meter Test Engineer will be focused on the testing and validation of both ANSI and IEC smart meters. They are responsible for executing test strategies and methods to ensure high quality on near term and longer-range projects with substantial business impact.

Essential Responsibilities:

- Create and execute test plans and test procedures from functional specification and design documents for H/W, and F/W of residential meters
- Interpret and present test results / metrics to project team in an effective manner.
- Develop and implement automated test methodologies
- Verify resolution of resolved defects and participate in root cause analysis of reported defects
- Ensure all products are compliant to the regulations of the country being sold at (e.g. ANSI, CE, MC)
- Review and develop test records / logs / certificate documents
- Interface with and review the work products of testing vendors for technical content and conformance
- Develop Accelerated Life Test procedures on residential meter electronics with analysis
- Ensure test records are accurate and complete
- Work with third party AMI vendors to ensure adequate test coverage of the complete metering system
- Use third party AMI tools for testing meter systems

- Perform test coverage analysis of AMI system
- Troubleshoot test failures to root cause

Requirements:

BS or MS in Engineering (i.e. Computer Engineering, Computer Science, Electrical Engineering)

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**GE Energy - Smart Grid Software Engineer - full time - December grads only**

(see company description above)

The Smart Grid Software Engineer is focused on the integration of the sensor and data acquisition systems that are currently used across the electricity grid. Efforts to create a smart grid "backbone" are also ongoing, and this role will support the communication of the sensing and data acquisition sub-systems with this "backbone".

Essential Responsibilities:

- Develop applications and protocols for integration of electric grid components enabling fast and efficient communication and data transfer to point of use by utility customers and end users
- Work jointly with integrated GE design teams
- Design, develop & test firmware / software on embedded systems
- Troubleshoot, resolve issues and enhance existing applications designed using C++ &
- Develop conceptual designs and detailed designs in accordance with established engineering processes, submit design code for reviews, and update the designs as required as a result from reviews
- Develop new technology relevant to the industry and Transmission & Distribution products and identify ways to apply that technology in new products
- Resolve field issues and quality issues through analysis and design changes
- Create required design documentation as per NPI Guidelines

Requirements:

BS or MS in Engineering (i.e. Computer Engineering, Computer Science, Electrical Engineering)

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**GE Energy - Smart Grid Software Test Engineer- full time - December grads only**

(see company description above)

A Smart Grid Software Test Engineer for advanced applications will be responsible for delivering the next era of software products for GE Energy with world-class software quality.

These products include the design and development of new advanced algorithms and artificial intelligence software technologies that support GE's Smart Grid initiative, which will redefine how the world generates, consumes, and understands its consumption of power.

Essential Responsibilities:

- Work in an agile team with 5-9 peers
- Work with Product Line Leaders (PLLs) to understand product requirements & vision; translate that vision into a prioritized list of user stories and deliver to required timelines and quality standards
- Develop test cases that verify and validate customer value is delivered
- Expand domain knowledge, become an expert in your focus area
- Support process improvements driving quality and productivity
- Instrument code with clearly expressed and repeatable automated tests
- Drive world-class quality in the software products developed by the team
- Communicate effectively both within immediate team and also across Software Solutions Group (SSG) leadership team and with PLLs
- Work closely with domain experts and translate their knowledge into working software

Requirements:

BS or MS in Engineering (i.e. Computer Engineering, Computer Science, Electrical Engineering)

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**GE Energy - Smart Grid AMI Test Engineer-full time - December grads only**  
(see company description above)

The AMI Test Engineer develops and delivers solutions for GE's Smart Grid solution. They are responsible for developing and executing test procedures and methods to ensure high quality on near term and longer-range projects with substantial business impact.

Essential Responsibilities:

- Create and execute upon test plans and test procedures from functional specifications, customer requirements, and design documents for end-to-end testing of AMI metering systems (These systems consist of a wide range of communication technologies including WiMax, RF Mesh Networks, Power Line Carrier, GSM, and iDEN)
- Work with third party AMI vendors to ensure adequate test coverage of the complete metering system
- Use third party AMI tools for testing meter systems

- Perform test coverage analysis of AMI system
- Build and maintain testing environment
- Perform manual testing as required to validate deliverables
- Develop automated test cases for testing AMI metering system
- Communicate metrics and reports on status of testing to management and engineering teams
- Learn the Metering and AMI domain and apply that knowledge to develop testing products
- Design tests beyond simple functional verification to include performance, boundary and negative testing
- Interpret and present test results / metrics to project team in an effective manner

#### Qualifications/Requirements

BS or MS in Engineering (i.e. Computer Engineering, Computer Science, Electrical Engineering)

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#### **HighPoint Solutions - Business Analyst - full time**

HighPoint Solutions is a premier provider of specialized IT services dedicated to the Life Sciences and Healthcare industries. Since 2000, our business consulting and technology solutions have delivered, and continue to deliver, business value and competitive advantage to our clients.

With offices in Philadelphia, New Jersey, Chicago, and Los Angeles, our team of 400 consultants is strategically located to meet your needs through our laser focus on key industries, partners, and technologies.

HighPoint Solutions is a rapidly growing business and technology consulting firm focused on strategic management consulting, business process improvement, and the application of technology to solve our clients' challenges. Within Life Sciences and Healthcare, we work with today's industry leaders and are rapidly becoming a premier consulting firm within these industries. How are we doing it? We provide both deep subject matter expertise within the industry and technical know-how to develop unique solutions based on each client's unique challenges. We also hire the best and brightest at every level and develop them through ongoing training and a variety of consulting projects.

For undergraduate hires, this means consulting on a wide array of industry specific areas including Pricing & Contracting, Master Data Management, Quality & Compliance, and Sales Force Incentive Compensation just to name a few. At HighPoint Solutions, you can expect that each consulting project will present new challenges, address unique business issues, and require strategic utilization of information technology.

#### **JOB DESCRIPTION:**

An Analyst in our Life Sciences Solutions will be an integral part of a project team with responsibility for interacting directly with clients, developing project documentation and

formulating solutions. We provide our consultants with career coaches who are typically senior level consultants. They are there to help grow and drive your career.

#### QUALIFICATIONS

- An interest in pursuing a career within the Life Sciences industry through work experience and/or extracurricular activities
- Transcripts from an accredited academic institution
- Savvy with common Microsoft applications including Word, PowerPoint, Excel, Visio, and MS Project
- Desire to work with people of all levels, including peers, managers and company executives
- Experience in creative and analytically challenging problem-solving environment
- Ability to succeed in a fast-paced work environment
- Excellent written, oral and interpersonal communications skills

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#### **HighPoint Solutions - Programmer - full time**

(see above for company descriptions)

HighPoint Solutions is a rapidly growing business and technology consulting firm focused on strategic management consulting, business process improvement, and the application of technology to solve our clients' challenges. Within Life Sciences and Healthcare, we work with today's industry leaders and are rapidly becoming a premier consulting firm within these industries. How are we doing it? We provide both deep subject matter expertise within the industry and technical know-how to develop unique solutions based on each client's unique challenges. We also hire the best and brightest at every level and develop them through ongoing training and a variety of consulting projects.

For undergraduate hires, this means consulting on a wide array of industry specific areas including Pricing & Contracting, Master Data Management, Quality & Compliance, and Sales Force Incentive Compensation just to name a few. At HighPoint Solutions, you can expect that each consulting project will present new challenges, address unique business issues, and require strategic utilization of information technology.

#### JOB DESCRIPTION:

As an entry-level programmer, you will be an integral part of a project team with responsibility for developing computer code; developing project documentation; formulating solutions; and participating in teams to structure analyses, assess findings and develop recommendations. Core responsibilities will include:

- Taking part in business process decomposition and re-engineering in technology implementation project teams
- Performing client interviews, assisting in interview guide development and summarizing interview notes
- Developing units of code per specification
- Testing code and documenting test results
- Documenting code
- Developing, training and recruiting new Associates

#### QUALIFICATIONS

- An interest in pursuing a career within the Life Sciences and/or Healthcare industries through work experience and/or extracurricular activities

- Transcripts from an accredited academic institution
- ▶ Academic excellence with proven success in quantitative areas
- ▶ Superior intellectual and analytical abilities
- A base understanding of any of the following technologies:
  - ▶ VB.Net, ASP.Net, Classic ASP, Microsoft SQL Server, JAVA, XML , HTML, T-SQL, and an Understanding of Relational Databases
- Savvy with common Microsoft applications including Word, PowerPoint, Excel, Visio, and MS Project
- Desire to work with people of all levels, including peers, managers and company executives
  - ▶ The drive and energy to succeed and be a team player
- Experience in creative and analytically challenging problem-solving environment
- ▶ A results-oriented perspective combined with creativity and a natural sense of curiosity
- Ability to succeed in a fast-paced work environment
- A self-imposed standard of excellence
- Excellent written, oral and interpersonal communications skills
- Interest in the role of technology in improving the effectiveness, quality and profitability of our clients' services

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**HydroQual, Inc. - Water Resources Engineer/Scientist - full time**

HydroQual is a privately-owned environmental engineering and consulting firm established in 1980. The firm specializes in mathematical modeling to evaluate the fate and transport of pollutants and the effect of their presence across watersheds and in natural water systems, environmental hydrodynamics and sediment transport modeling, natural resource investigations, permitting assistance, and the assessment and optimization of water and wastewater treatment processes. The firm provides a wide range of integrated science and engineering consulting services to public and private clients world-wide.

HydroQual's Water Resources Practice focuses on the application of hydrologic/hydraulic principles, physics, chemistry, biology, and modern mathematical modeling to understand the fate and transport of contaminants in the natural environment We apply simple to complex watershed models and one-, two-, and three-dimensional water-quality models and processing tools, including visualization and animation routines to problems associated with flows (e.g., flooding & erosion), nutrients, dissolved oxygen, pathogens, metals and organic contaminants. HydroQual also provides services in the design and execution of field monitoring efforts.

HydroQual, an ENR Environmental 200 firm seeks candidates for Water Resources Engineer/Scientist positions. Responsibilities include:

- Collect, collate, and analyze environmental data from available databases.
- Set up and execute mathematical models.
- Perform quality-control checks on model input and results.
- Develop statistical and graphical (static and animations) comparison of model results and

data

- Participate in project meetings, proposal preparation, report writing, presentations and assist project managers on large scale projects.

Successful candidates will possess the following:

- B.E./B.S. in environmental engineering / science required; M.E./M.S. in applicable area a plus.
- Strong analytical and problem-solving skills.
- Strong interpersonal and oral/written communication skills
- Excellent computer skills, including MS Excel and Word; GIS skills a plus.
- Programming and debugging skills (e.g. MATLAB, VB/VBA, FORTRAN).
- Intellectual curiosity and the ability to learn through self-motivated and self-directed study.

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### **Johnson Controls - Engineering Training Program**

We are the global leader in providing building automation systems and heating, ventilating and air conditioning (HVAC) equipment for non-residential buildings. We provide technical services to maintain and repair building systems. We also manage and operate thousands of facilities for Fortune 500 firms around the world.

The engineering Training Program (ETP) is a developmental program designed to provide engineers with a well rounded view of the Company, our HVAC products, markets , and operations by requiring project deliverables through a rotational training program. The program targets the best and brightest to join Johnson Controls team and develop into the leaders and technical experts of the future.

The program length is approximately 13 months and requires joint commitment from both management personnel and engineer participants to the completion of the program.

#### Deliverables

- For Participants - The program will provide well-rounded, multi-faceted training allowing exposure to the many career opportunities at Johnson Controls as well as engagement with many functional teams.
- For JCI - The program will develop a pool of talented engineers to effectively support the on-going growth and needs of the business.

#### Mentoring

An essential element of this program is the establishment of a close working relationship between the engineer and a senior staff member. Mentoring promotes the expansion of professional knowledge, skills and abilities in areas of career development allowing opportunities for the engineers to reach their full potential.

#### Travel & Social Events

There may be opportunities to travel domestically and/or internationally to support the

application, production, marketing, and sales of Johnson Controls equipment. The ETP also includes network building events with colleagues at different levels within the organization.

**Program Conclusion and Final Placement**

As the training program reaches conclusion, each engineer will have an opportunity to discuss his or her job assignment preferences with a company representative. Those preferences will be given consideration when the company determines final placement of the engineer into a position.

Qualifications: Candidates must have a four-year Engineering degree. Preference will be given to candidates that have taken specific classes related to the HVAC industry (such as thermodynamics, heat transfer, etc.) and/or those who have served internships with JCI or another company in the HVAC industry.

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**Lexmark International, Inc. - Engineering Internship**

Lexmark International, Inc. (NYSE: LXX) provides businesses of all sizes with a broad range of printing and imaging products, solutions and services that help them to be more productive. In 2008, Lexmark sold products in more than 150 countries and reported \$4.5 billion in revenue.

Start your technical career with real-world professional engineering experience through Lexmark’s Technical Rotation Program for Engineers (TRP). These opportunities are full-time regular positions with three six to nine month assignments (18-24 months total) specifically in technical development for top recent college graduates with technical degrees, strong capacity for learning, and outstanding leadership skills. The program allows you, as an employee, to accelerate your career growth and find your ideal fit within Lexmark by exposing you to various processes and technologies in 1) hardware / software development, 2) test engineering, and 3) product / process development. This program offers you an opportunity to select and prioritize three six – nine month rotations in each of these three technical areas.

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**Lutron Electronics - Project Electrical Engineer-Embedded (full time)**

Joel and Ruth Spira founded Lutron Electronics Company, Inc. in 1961. Lutron's first product was called a dimmer switch and represented the world's first solid-state electronic device used to dim lights in a home, replacing bulky rheostats and autotransformers that were inefficient and unattractive. Although Lutron has grown substantially over the past several decades, the company still maintains the feel and personal closeness of a smaller firm, and to this day still operates under the guidance of the company's 5 Principles:

- \* Take care of the CUSTOMER.
- \* Take care of the COMPANY.

- \* Take care of the PEOPLE.
- \* INNOVATE with a HIGH STANDARD OF QUALITY.
- \* Deliver VALUE to the CUSTOMER.

Today, over 45 years later, Lutron is still devoted to controlling lighting. Our focus on product innovations, technology, quality, and customer service has made us the undisputed leader worldwide in the area of lighting controls. We offer more than 10,000 products to satisfy virtually any residential or commercial project. Lutron products adjust the intensity of virtually every kind of light, and we remain to this day the only company that provides an integrated solution for controlling both natural daylight as well as electrical lighting.

Lutron Electronics is the world leader in the design and manufacture of lighting controls, lighting control systems and shading solutions for residential and commercial applications. As a Project Electrical Engineer with an embedded systems focus, this is what your workday might be like:

#### A Day in the Life of an Electrical Engineer at Lutron

- 8:00am – Prepare day's agenda, check and respond to emails
- 8:30am – Meeting: review code with supervisor for new software feature
- 9:30am – Talk with manufacturing engineer regarding recent prototype run
- 10:00am – Work at desk: reproduce software bug seen in field, start writing code to correct issue
- 11:00am – Train Tech Support staff on new product features
- 11:30am – Talk with technician to review results of software test plan
- 12:00pm – Have lunch with a vendor to discuss new microcontroller offerings
- 1:00pm – Consult with a senior engineer on a technical problem
- 1:45pm – Weekly meeting: update team on progress of your projects
- 2:15pm – Work at desk: start implementing software for new wireless lighting scene control
- 3:30pm – Meeting: system architecture review
- 4:30pm – Work at desk: workbench testing, follow-up on emails
- 6:00pm – Meet up with co-workers for ultimate frisbee

Does this sound like how you would like to spend your day?

If so, Lutron is looking for candidates with the following criteria:

- Bachelor's degree in Electrical or Computer Engineering, Physics, or Math, with at least a 3.0 GPA
- Strong understanding of embedded coding in C/C++/assembly, system architecture design, and board-level hardware
- Enjoys working collaboratively while also thriving in a leadership position
- Willingness to travel – visit and troubleshoot job sites, oversee manufacturing at other facilities, take offsite training courses, accompany a salesperson to showcase your new

product to a customer

- Hands-on attitude and strong work ethic
- Communication skills with all departments and disciplines
- Ability to take direction from others while also being able to work independently
- Skillful at solving problems with enthusiasm and creativity
- Self-starting, inquisitive, flexible, multi-tasking
- Driven to maintain high standards of quality, even under pressure

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### **Lutron Electronics - Project Software Engineer**

(see above for company description)

Lutron Electronics is the world leader in the design and manufacture of lighting controls, lighting control systems and shading solutions for residential and commercial applications. As a Project Software Engineer, this is what your workday might be like:

A Day in the Life of a Software Engineer at Lutron

- 8:00am – Prepare day's agenda, check and respond to emails
- 8:30am – Touch base with supervisor to discuss progress on projects and to review priorities moving forward
- 9:00am – Work at desk: design class structure for a new power monitoring feature to be implemented in Lutron's lighting system software
- 10:30am – Lead a training class for visiting lighting designers on how to configure Lutron's advanced lighting systems
- 12:00pm – Have lunch with a candidate interviewing for a job at Lutron
- 1:00pm – Work at desk: fix and re-run unit tests that failed in last night's build
- 2:00pm – Work at desk: finish initial design proposal
- 2:30pm – Meeting: review design proposal with peers
- 3:30pm – Receive a call from Tech Support, speak with a customer to resolve a unique technical issue
- 4:00pm – Work at desk: start implementation of the initial design using Visual C#
- 6:00pm – Meet up with team for dinner

Does this sound like how you would like to spend your day?

If so, Lutron is looking for candidates with the following criteria:

- Bachelor's degree in Computer Engineering, Computer Science, Physics, or Math, with at least a 3.0 GPA
- Strong understanding of object oriented design concepts using C++/C#/Java, experience with GUI development, design patterns, database architecture and network programming; Human Computer Interaction (HCI) experience is a plus
- Enjoys working collaboratively while also thriving in a leadership position
- Willingness to travel – visit and troubleshoot job sites, oversee manufacturing at other facilities, take offsite training courses, accompany a salesperson to showcase your new product to a customer
- Hands-on attitude and strong work ethic
- Communication skills with all departments and disciplines

- Ability to take direction from others while also being able to work independently
- Skillful at solving problems with enthusiasm and creativity
- Self-starting, inquisitive, flexible, multi-tasking
- Driven to maintain high standards of quality, even under pressure

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### **Lutron Electronics - Project Electrical Engineer - Analog (full time)**

(see above for company description)

Lutron Electronics is the world leader in the design and manufacture of lighting controls, lighting control systems and shading solutions for residential and commercial applications. As a Project Electrical Engineer with an analog focus, this is what your workday might be like:

#### A Day in the Life of an Electrical Engineer at Lutron

- 8:00am – Prepare day's agenda, check and respond to emails
- 8:30am – Check on new product testing left running overnight in test building
- 9:00am – Meeting: discuss printed circuit board layout for a new product
- 10:00am – Receive a call from Tech Support, speak with a customer to resolve a unique technical issue
- 10:15am – Work at desk: build prototype for new product
- 11:00am – Meeting: work with Marketing to brainstorm ideas for a revised brochure on an existing product
- 12:00pm – Have lunch with co-op that you are supervising
- 1:00pm – Work at desk: discuss technical problem with neighbor, update supervisor on progress, review next steps for product release
- 3:00pm – Weekly meeting: update team on progress of your projects
- 3:30pm – Meeting: determine root cause of manufacturing defect from recent prototype run
- 4:00pm – Work at desk: workbench testing, follow-up on emails
- 6:00pm – Meet up with co-workers for dinner

Does this sound like how you would like to spend your day?

If so, Lutron is looking for candidates with the following criteria:

- Bachelor's degree in Electrical or Computer Engineering, Physics, or Math, with at least a 3.0 GPA
- Strong understanding of discrete circuitry and physics fundamentals; power electronics experience is a plus
- Enjoys working collaboratively while also thriving in a leadership position
- Willingness to travel – visit and troubleshoot job sites, oversee manufacturing at other facilities, take offsite training courses, accompany a salesperson to showcase your new product to a customer
- Hands-on attitude and strong work ethic
- Communication skills with all departments and disciplines
- Ability to take direction from others while also being able to work independently
- Skillful at solving problems with enthusiasm and creativity
- Self-starting, inquisitive, flexible, multi-tasking

- Driven to maintain high standards of quality, even under pressure

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**Metron, Inc. - Software Developer - full time**

Metron is a scientific consulting firm with expertise in the areas of physical modeling, mathematics, operations research, and software development. We address challenging problems in the development of high technology systems for defense, aerospace, and commercial applications.

The Metron staff uses its strengths in mathematical and physical modeling to realize software solving a broad class of technically challenging problems for our clients. Examples of recent project areas are:

- Graph theory and information theory applied to counter-terrorism
- Game theory and large scale multi agent systems
- Large scale optimization algorithms for strategic airlifts
- Signal processing algorithms for new sensor systems
- Detailed underwater physical acoustics modeling
- Distributed multi-target tracking software.
- Planning tools to coordinate attack, fighter and missile aircraft
- Physical modeling and evaluation of laser detection systems

A candidate's specific training in mathematics is not as important as their innate ability and a willingness to learn new areas of mathematics and work on hard problems. In fact, we have employees whose dissertations were in the areas of Operator Theory, Banach Algebras, Complex Variables, Algebraic Geometry and Logic, all of whom make significant mathematical contributions to their projects.

Metron's east coast operations are located in northern Virginia. There we develop new R&D business areas through the application of mathematics, physics, and computer science. Each project is led by a Senior Analyst responsible for the mathematical and physical modeling. Software Developers are responsible for implementing software prototypes incorporating the models. Project teams are very small, averaging 2-3 people. Each person is involved in the entire prototype development process, from concept through design and implementation to demonstration.

At Metron, our Reston office is seeking talented programmers for R&D projects with strong probabilistic and statistical foundations. As a Software Developers, you will be responsible for implementing software prototypes incorporating the models. Project teams are very small, averaging 2-3 people. Each person is involved in the entire prototype development process, from concept through design and implementation to demonstration. Our no-nonsense management structure gives you the freedom to create products you can be proud of.

Desired Qualifications:

- BS or MS in Computer Science, Operations Research, Math, Statistics, or Engineering
- Significant programming experience in JAVA or C++
- Some work with higher-level languages preferred (Python, Perl, Lisp, etc.)
- Familiarity with Linux and Windows preferred
- Excellent communication skills, both written and oral
- US CITIZENSHIP REQUIRED

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**Metron, Inc. - Internship**

(see above for company description)

At Metron, our Reston office is seeking talented graduate and undergraduate summer interns to contribute hands-on work to various projects. The successful candidate will work in small teams, led by Senior Analysts, who work closely with the new employees. Projects typically involve developing advanced algorithms implemented in a computer prototype system for our R&D customers.

Desired Qualifications:

- Graduate interns should have at least a BS in one of the following areas: Computer Science, Math, Physics, Engineering or Operations Research
- Undergraduate interns should have completed coursework in one of the above areas
- Some programming experience is preferred (C, C++, Java, Matlab, etc.)
- US CITIZENSHIP REQUIRED

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**Metron, Inc. - Analyst - full time**

At Metron, our Reston office employs mathematicians, physicists and computer scientists. We routinely apply stochastic processes, statistical inference, optimization and scheduling, models of random graphs and applied physics to develop the underlying theory and applications for our clients.

Projects typically involve developing advanced algorithms implemented in a computer prototype system for our research & development customers. We work in small teams, led by Senior Analysts, who work closely with new employees. Project teams work together from the initial system concept, through software and algorithm design, to implementation and demonstration. We believe an employee's specific academic training is not as important as their innate ability and willingness to learn new areas of mathematics and work on difficult problems.

Our Reston office is seeking talented candidates to develop mathematical models and algorithms, develop and demonstrate prototype software, and participate in operational analysis related to their technical work. The successful candidate will interact with customers, both onsite and offsite, gather requirements and data, write and present briefings, and contribute to the development of Metron tools.

Desired Qualifications:

- BS, MS or PhD in Computer Science, Math, Physics or Operations Research
- Some programming experience is preferred (C, C++, Java, Matlab, etc.)
- Mathematical, simulation, or physical modeling experience highly desired

• US CITIZENSHIP REQUIRED

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**Schindler Elevator - Schindler Career Development Program (SCDP) - Full-time**

Schindler moves more than 900 million people every day, all over the world, with elevators, escalators and innovative mobility solutions. Around 45,000 employees in more than 100 subsidiaries on all continents are behind this success.

Schindler Career Development Program (SCDP)

Our employees operate out of our US Headquarters in Morristown, NJ; our manufacturing plants in Gettysburg, PA and Clinton, NC; our Service Center of Excellence in Holland, OH; and our North America R&D facility in Randolph, NJ.

Mobility is the goal

The Schindler Career Development Program is a 6 year, on-the-job leadership training program and is reserved for selected candidates holding a Masters degree and consists of:

- Three stages, each stage is 2-3 years
- Three functional career tracks: Engineering, Field Operations, Business Administration
- Systematic rotation between career tracks
- International exchange for two years (required)

Mobility needs you

You are an independent, self-starting, flexible individual with significant development potential. Qualifications include:

- Masters graduate or expect to graduate in 2009-
- 3.6 GPA or higher (must submit transcript as proof prior to interview)-
- Majors in Electrical/Computer Engineering and Mechanical Engineering-
- 2 to 3 years previous work or any relevant internship experience highly preferred-
- Candidates must have less than 5 years post-graduate work experience-
- Demonstrated leadership experience (either in previous work experience or schooling)-
- Must be internationally mobile as a 2 year international assignment is required-
- Fluency in more than one language is a plus, but not required-
- Must- be able to travel to attend an international entry conference and any applicable training courses (both local and international)

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**The Fulcrum Group - Engineers - full time**

Fulcrum is a dynamic young firm with a unique breadth and depth of both assets and clients. Like the simple machine for which it is named, Fulcrum is focused on maximizing its leverage to deliver extraordinary services to its clients in the technical facilities management fields of building commissioning, retro-commissioning, energy efficiency services, capital program management, and operational management services. Fulcrum prides itself on delivering buildings that meet and exceed their design intent in timely cost-efficient and cost-effective ways. Fulcrum is based in the metropolitan New York City region but presently

delivers services to clients throughout the nation.

The Fulcrum Group is a young but well-proven leader in the field of technical facilities and project management. Fulcrum strives to discover and develop exceptional entry level Mechanical or Electrical Engineers in the New York Metro area. The diverse work assignments require someone capable of assimilating complex financial and technical issues, organization, analysis, and communicating engineering-related subjects and programs with both precision and fluency. Typical applicants demonstrate an ability to analyze, refine, and develop evaluation methodologies across technical service projects and programs. Entry level employees are exposed to a variety of elements of the business and often find themselves playing a role in the development of proposals, reviews, and reports on the effectiveness of various engineering designs, approaches, and installations. Furthermore, Fulcrum's employees require the capacity to coordinate and collaborate with various groups, including architects, engineers, construction managers, systems operators, financial officers, and trustees.

A typical position requires proven proficiency in producing professional high-quality reports and presentations for a variety of audiences. Other requirements include flexibility and the ability to collaborate with others while facing multiple priorities and aggressive deadlines; the ability to plan, coordinate, and implement multiple complex projects at the same time; capacity to work in both the boiler room and the board room and at all points between.

Fulcrum employees are able to distil complex technical information into understandable text and graphics for incorporation into reports, presentations, articles, web sites, and other media as required. Critical elements of the process include strong analytical skills, proven writing and speaking capabilities, and the ability to work well independently and on various teams.

Ideal entry level employees have received an undergraduate degree with a focus in Mechanical and/or Electrical engineering.