SAMPLE CIVIL ENGINEERING RESUME – Sophomores, Freshmen

BRIDGET SPECTOR

bspector@andrew.cmu.edu

Current Address: SMC 123, 5032 Forbes Avenue, Pittsburgh, PA 15289 (412) 511-4422
Permanent Address: 21 School Avenue, Philadelphia, PA 19111

OBJECTIVE

To obtain a summer internship in the field of civil engineering that will utilize my problem solving and leadership skills.

EDUCATION

Carnegie Mellon University — **Pittsburgh, PA**
Bachelor of Science in Civil Engineering, May 2015
Overall GPA: 3.20/4.0

Best High School — **Philadelphia, PA**
High School Diploma, June 2011
GPA 3.82/4.0

PROJECTS

Cardboard Structure, Fall 2011
- Designed and constructed a cardboard bridge meant to support the average adult male.
- Prepared scale models for analysis of alternatives, prior to final test.

Brick Wall Scheduling, Fall 2011
- Developed a bid proposal for building a brick wall.
- Conducted time studies and generated Gantt charts to investigate most economical method of using resources.

Traffic Light Timing, Fall 2011
- Conducted studies on the flow of traffic through three intersections on Forbes Avenue.
- Designed more efficient traffic light cycles based on collected data.

WORK EXPERIENCE

Pennsylvania Governor's School for the Sciences — **Pittsburgh, PA**
Teaching Assistant, Summer 2012
- Graded papers, fielded questions and held review sessions for Organic Chemistry.
- Led a group of students in the area of Spectroscopic Analysis.
- Acted as a Residential Assistant for 90 students, providing support, enforcing dorm policy, and sponsoring recreational activities.

Happy Summer Camp — **Springfield, NJ**
Camp Counselor, Summer 2010
- Created and coordinated activities for ten campers 10-12 years old.
- Helped administrators to set-up for parents weekend.

LEADERSHIP

Vice-President, American Society of Civil Engineers (ASCE), Spring 2011-present
- Organize monthly speaker series, which has seven corporate and alumni speakers.
- Motivate the 65 members to attend meetings and events.

SKILLS

Operating Systems: Windows, MacOS
Software: Microsoft Office, AutoCAD, MathCAD, Maple, Sure Track, MS Project, C++
Languages: Fluent in Spanish; Conversant in French

ACTIVITIES & HONORS

Alpha Phi Omega Service Fraternity, 2011-present
Kiltie Band, 2011-present
American Society of Civil Engineers (ASCE), 2011-present
Orientation Counselor, Fall 2012
Orchestra, Best High School, 2008-2011
National Honor Society, Best High School, 2011

SAMPLE CIVIL ENGINEERING RESUME – Seniors, Juniors

BRIDGET SPECTOR

bspector@andrew.cmu.edu

Current Address: SMC 123, 5032 Forbes Avenue, Pittsburgh, PA 15289 (412) 511-4422
Permanent Address: 21 School Avenue, Philadelphia, PA 19111

OBJECTIVE

To obtain a full time position in the field of Civil Engineering that utilizes my analytical and interpersonal skills

EDUCATION

CARNEGIE MELLON UNIVERSITY **Pittsburgh, PA**
Bachelor of Science in Civil Engineering, May 2012
Major GPA: 3.22/4.0 Overall GPA: 3.0/4.0

RELEVANT EXPERIENCE

Michael Baker Inc. **Pittsburgh, PA**
Structures Intern, Summer 2011

- Collaborated on a pre-cast segmental post-tensioned box girder bridge project
- Designed and performed quality control of stress analysis spreadsheets
- Created bridge model and evaluated construction stages using MIDAS/Civil

PROJECTS

Civil Engineering Design, Spring 2011

- Designed and constructed a solution to water runoff problem at a site adjacent to parking lot
- Project leader for design, scheduling and cost estimation of new site

Window Power Feasibility Study, Fall 2010

- Studied the cost benefits and structural ability of installing wind turbines on the roof of a building in Pittsburgh (Pittsburgh Technology Center)
- Gathered relevant cost and system information from manufacturer sales associate

Intersection Development, Fall 2010

- Developed alternative designs to improve safety and maintain efficient traffic flow of problematic intersection in Gibsonia, PA
- Delivered oral proposal and final recommendation

ADDITIONAL EXPERIENCE

Pennsylvania Governor's School for the Sciences Pittsburgh, PA
Teaching Assistant, Summer 2010

- Graded papers, fielded questions and held review sessions for the Organic Chemistry core course
- Served as a team project leader for a group of students in the area of Spectroscopic Analysis
- Acted as Resident Assistant for 90 students, providing support, and sponsoring recreational activities

LEADERSHIP

Vice-President, American Society of Civil Engineers (ASCE), Fall 2010 – present

- Organize monthly speaker series, which has seven corporate and alumni speakers
- Motivate the 65 members to attend meetings and events

RELEVANT COURSES

Air Quality Engineering	Engineering Economics	Technical Communications
Solid Mechanics	Fluid Mechanics	Design and Construction
Engineering Statistics	Soil Mechanics	Civil Engineering Design

SKILLS

Computer: Microsoft Office, AutoCAD, MathCAD, Maple, MS Project, MIDAS/Civil
Languages: Fluent in French; Conversant in Spanish

ACTIVITIES & HONORS

Chi Epsilon, Civil Engineering Honor Society, Spring 2010-present
American Society of Civil Engineers, Fall 2008-present
Varsity Volleyball, Carnegie Mellon, Fall 2008-present
Pittsburgh Cares Volunteer and Project Coordinator, 2009-2011
Orientation Counselor, Fall 2009
College of Engineering Dean's List (GPA 3.75 and above), Spring 2010, Fall 2010

SAMPLE CIVIL ENGINEERING RESUME – Master's Degree

BRIDGET SPECTOR

bspector@andrew.cmu.edu

Current Address: SMC 123, 5032 Forbes Avenue, Pittsburgh, PA 15289 (412) 511-4422
Permanent Address: 21 School Street, Harrisburg, PA 18111

OBJECTIVE

To obtain a full time position in the field of Civil Engineering that utilizes my analytical and interpersonal skills

EDUCATION

CARNEGIE MELLON UNIVERSITY — **Pittsburgh, PA**
Master of Science in Civil & Environmental Engineering, May 2012
Concentration: Advanced Infrastructure Systems

CORNELL UNIVERSITY — **Ithaca, NY**
Bachelor of Science in Civil Engineering, May 2011
Overall GPA: 3.20/4.0

RELEVANT EXPERIENCE

MICHAEL BAKER JR., INC — **Pittsburgh, PA**
Structures Intern, Summer 2011

- Collaborated on a pre-cast segmental post-tensioned box girder bridge project
- Designed and performed quality control of stress analysis spreadsheets
- Created bridge model and evaluated construction stages using MIDAS/Civil

LEHIGH UNIVERSITY ATLSS PITA – REU — **Bethlehem, PA**
Student Researcher, Summer 2010

- Analyzed axial forces carried by suspension rods of Reiglesville Bridge (ASCE National Historic Landmark) which spans the Delaware River from Reigelsville, PA to Reigelsville, NJ

PROJECTS

High Speed Rail Sensor Network Proposal, Fall 2011

- Developing proposal for sensor network research for application to high speed rail health monitoring for *Infrastructure Management* term project
- Proposing a synthesis of robust technologies to incorporate in an embedded sensor network for real-time rail flaw detection

Transportation Efficiency Study, Fall 2010

- Developing framework for determining and evaluating student use of available transportation options, with respect to university expenditures and students' preferences, for *Decision Analysis and Decision Support Systems* term project

Civil Engineering Design, Spring 2010

- Designed and constructed a solution to a water runoff problem at a site adjacent to parking lot
- Project leader for design, scheduling and cost estimation of new site

RELEVANT COURSES

Graduate Courses:	**Undergraduate Courses:**
Finite Element Method	Structural Steel Design
Advanced Elasticity	Construction Management
Structural Dynamics	Advanced Mechanics of Materials

SKILLS

Computer: Microsoft Office, AutoCAD, MathCAD, Maple, MS Project, MIDAS/Civil
Languages: Fluent in French; Conversant in Spanish

ACTIVITIES & HONORS

American Society of Civil Engineers, Treasurer, 2009-2010; Member 2008-Present
Pittsburgh Cares Volunteer and Project Coordinator, 2010-Present
Chi Epsilon, Civil Engineering Honor Society, Vice President, 2009-2011
Orientation Counselor, Fall 2009
College of Engineering Dean's List, Spring 2010, Fall 2010
The Alice C. Smith Scholarship, 2010

SAMPLE CIVIL ENGINEERING RESUME – PH.D.

BRIDGET SPECTOR

222 Fifth Avenue, Apartment 2D
Pittsburgh, PA 15213
bspector@andrew.cmu.edu
(412) 555-5225

RESEARCH INTERESTS

Environmental, social and economic impacts of energy production and use; current and future electricity generation, transmission and distribution technologies; full supply chain life-cycle assessment of energy systems; hybrid life -cycle inventory and assessmen

EDUCATION

Carnegie Mellon University, Pittsburgh, PA
Ph.D. Civil & Environmental Engineering and Engineering & Public Policy, May 2012
- Advisors: H. Scott Matthews, Lester B. Lave, Jay Apt, Chris T. Hendrickson
- Thesis title: "An Electricity-focused Economic Input-output Tool: Life-Cycle Assessment and Policy Implications of Future Electricity Generation Scenarios"

M.S. Civil & Environmental Engineering, May 2008
- Advisor: H. Scott Matthews
- Concentration in Green Design

University of California-Berkeley, Berkeley, CA
B.S. Electrical Engineering & Computer Science, May 2002

PROFESSIONAL EXPERIENCE

Project Scientist/Engineer, Green Design Institute, 2012-Present
Carnegie Mellon University, Pittsburgh, PA
- Post-doctoral research on next-generation electricity generation

Adjunct Faculty, Civil & Environmental Engineering Department, Fall 2012
University of Pittsburgh, Pittsburgh, PA
- Teach introductory sustainable engineering course for undergraduates

Graduate Research Assistant, Carnegie Mellon Electricity Industry Center, 2007-2011
Carnegie Mellon University, Pittsburgh, PA
- Conducted life-cycle assessment of power generation construction and operation
- Researched environmental impacts of interstate electricity trading
- Examined climate change implications of U.S. nuclear fleet decommissioning

Technical Marketing Engineer, Optical Network Equipment, 2005-2007
DYNARC, San Jose, CA

Systems Engineer, Network Traffic Engineering, 2003-2005
Telcordia Technologies, Piscataway, NJ

TEACHING EXPERIENCE

Adjunct Faculty, Engineering and Sustainable Development, Fall 2011
Guest Lecturer, Advanced Life-cycle Assessment, Spring 2011
Teaching Assistant, Guest Lecturer, Quantitative Policy Analysis, Fall 2009, 2010
Teaching Assistant, Policy Analysis Project, Spring 2009
Teaching Assistant, Civil Systems Investment, Planning & Pricing, Fall 2008

TEACHING EXPERIENCE (continued)

Guest Lecturer, Technology and the Environment, Spring 2008
Teacher, Green Design Apprenticeship Program, Allegheny Intermediate Unit, Fall 2008 – 2010

OUTREACH & LEADERSHIP ACTIVITIES

Green Design Apprenticeship Program, 2008-Present

- Volunteer instructor and coordinator for group of local high school students interested in environmental engineering and green design

Green Design Reading Group, 2007-2010

- Prepare readings for a graduate student journal club

Coordinator, Graduate Student Association Volleyball League, 2009-2011

PROFESSIONAL ACTIVITIES & AWARDS

Michael Baker Corporation Graduate Fellowship, 2007-2008
International Society of Industrial Ecologists, Member, 2007-Present
Institute of Electrical and Electronics Engineers, Member, 2003-2005
Stephen Omar Lee Award for Outstanding Policy Project, 2004

PUBLICATIONS & WORKING PAPERS

Spector, B., Matthews, H. S., "Disaggregating the power generation sector for input-output life-cycle assessment". In preparation.

Matthews, D., Hawkins, T., Jaramillo, P., Spector, B., Sharrard, A., "Green Design Outreach: Teaching Sustainability to High School Students." In preparation.

Spector, B., Matthews, H. S., "Comparative Life-cycle Assessments Using Electricity Consumption and Generation Mixes". In preparation.

Spector, B., Matthews H.S., "Environmental Effects of Interstate Power Trading on Electricity Consumption Mixes". Environmental Science & Technology 2011; vol 39, 22.

"Wireless Communications for Emergency Response in Allegheny County," Policy Analysis Project Class Final Report to Allegheny County Emergency Services, December 2010.

Spector, B., "Increase in GWP from Decommissioning U.S. Nuclear Power Plants". Unpublished research paper, December 2009.

CONFERENCE PRESENTATIONS

"Moving Towards a Mixed-unit Input-output LCA Model for Power Generation." Accepted to International Life Cycle Assessment/Life Cycle Management Conference, Portland, OR, September 2012.

"Opportunities for Industrial Ecology in Power Generation Supply Chains." Presented at International Society for Industrial Ecology Conference, Toronto, Ontario, June 2012.

"Policy Implications of Power Generation Life-cycle Assessment." Presented at the Electric Utilities Environmental Conference, Tucson, AZ, January 2012.

"Building an Electricity-focused Economic Input-output LCA Tool to Analyze Future Power Generation Scenarios." Presented at International Life Cycle Assessment/Life Cycle Management Conference, Washington, DC, October 2011.

"Comparative Life-cycle Assessments Using Electricity Consumption and Generation Mixes." Presented at International Life Cycle Assessment/Life Cycle Management Conference, Washington, DC, October 2011.

"Improving the Life-Cycle Assessment of Electricity." Presented at International Society for Industrial Ecology Conference, Stockholm, Sweden, June 2011.