Rebecca S. Allen

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Objective

To obtain a full-time design position with an innovative Architectural/Mechanical engineering firm, while contributing in a positive manner towards a professional team goal and continuing to work towards my Professional Engineering License.

Education

Pennsylvania State University, *University Park, PA* Expected: June 2006
Bachelors/Masters of Architectural Engineering
Minor in Architecture
5 year ABET accredited program
Schreyer Honors College

- **Cumulative GPA: 3.49/4.0**

Sede di Roma, *Rome, Italy* May-July 2004

University of Leeds, *Leeds, England* September-December 2004

Work Experience

Buro Happold Engineers, *London, England* June-August 2005

- Created mechanical designs in AutoCAD.
- Compiled a building services precedence study for mixed-use residential buildings.
- Performed SAP Energy calculations following new UK carbon emission regulations.

Architectural Exhibition in Collegio Romano, *Rome,Italy* June-July 2004

- I was a main exhibitor at a gallery for architectural study of spaces in Rome.

Metro Louisville Facilities Management , *Louisville, KY* May-August 2003

- I served as an assistant to primary architect, drafting and detailing plans in AutoCAD.

Metro Louisville Public Works, *Louisville, KY* May-August 2003

- I worked closely with a civil engineer responding with site visits to violations of the Land Use Code, by helping review construction plans and issue permits.

Civil Engineering Lab Assistant, *University Park, PA* August 2001-May 2002

- WISER (Women in Science and Engineering Research) program.
- I assisted Graduate students with research, project methodology, and data collection.

Activities

Penn State Dance Marathon 2006, Overall Committee Member 2005-Present

- The world's largest student-run philanthropy, raising $4.1 million annually to fight childhood cancer.

Penn State Homecoming, Overall Committee Member 2005-Present

- A weeklong celebration of over 116,000 students, faculty, alumni, and community members.

National Panhellenic Council, Associate Vice President 2005-Present

- I organize 1,600 sorority women during four weeklong special events on campus.

AE Envoy, Architectural Engineering Department Representative 2003-Present
Greek Christian Crusade, Leader 2003-Present

Gamma Phi Beta Sorority, President 2004
Society of Women Engineers, Active Member 2001-2005

Honors

Chapter President of the Year, Penn State Greek Life Awards, 2005
Selected for Parmi Nous, Senior Honor Society, 2005
Winner of "Best of You" essay contest for Sally Hansen/Glamour Magazine, 2004
Dean's List: Spring 2003, Fall 2003, Spring 2004, Summer 2004

Awards

Happold Trust Scholarship, 2005-2006
James M. Pohlen Memorial Scholarship, 2005-2006
Sallie Mae / Employees First Source of Scholarships, 2004-2005
Herbert & Beatrice Meyer Scholarship, 2001-2006
Gladys M. Baird Architecture Engineering Scholarship, 2001-2003

Related Coursework

- Cogeneration: Combined Heat and Power Systems
- Centralized Cooling Systems
- Advanced Building Electrical Design
- Advance Architectural Acoustics
- Central Heating Systems
- Building Automation and Control Systems
- Fluid Flow
- Heat Transfer
- Advance HVAC Design
- Fire Protection Engineering

Computer Skills

- Carrier's HAP
- EES
- TRANE Trace
- MathCad
- AutoCAD
- Fortran Programming Language
- C++ Programming Language
- Microsoft Office

Thesis Research

Palestra Building Size: 37,098 m^2
Location: London, England Cost: £68 million

Architecture: This building incorporates many dramatic features including two-story 'dancing' columns, large cantilevers, and tilted façade. The raked columns on the 1st and 7th stories were dubbed 'dancing columns' for the movement perceived by the observer due to the striking angles they are erected at. A floating box effect is achieved at the 9th story where there is a 1.5 meter overhang on three sides of the building, and then a spectacular 9 meter cantilever overhanging on the fourth side.

Mechanical Systems: A gas-fired central boiler and chiller plant with a mechanically ventilated design due to the urban location and limited amounts of high quality fresh air.

Research: This design was completed before the new Part L Building Regulations that demands a 25% decreases in carbon emissions and better building efficiency. I am looking into the effect a CHP system with thermal storage along with a reduction in glazing while maintaining architectural integrity would have on the life cycle costs for the building.

References Available Upon Request