Current Address
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Macenzie A. Ceglar

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Permanent Address
1889 Bellmeade Dr.
Altoona, PA 16602

Objective

To acquire a full time structural engineering position in which I will be able to practice analysis and design, contribute my knowledge and skills to better the company, and have the opportunity to learn from experienced engineers.

Education

The Pennsylvania State University — University Park, PA
Integrated Bachelor/Master of Architectural Engineering - Structural Option — 2009-2014
Five year professional degree – ABET accredited — **GPA: 3.94/4.00**
EIT Status upon graduation in May 2014

Work Experience

The Pennsylvania State University, Teaching Assistant for Steel and Wood Design — **August 2013-Present**

- Guide student's progress in redesigning a multi-story concrete structure using steel
- Review periodic team submissions and provide feedback on proposed design concepts

Greenwood Pools – Altoona, PA; Sales and Retail, Lab Technician — **Summer 2007-Summer 2013**

- Observed the structural design and construction of swimming pools
- Aided clients in conceptualizing in ground swimming pool designs
- Developed excellent communication skills via in-person, over the phone, and written conversations
- Trained entry level employees in all technical aspects of water chemistry and pool retail

The Pennsylvania State University, Teaching Assistant for Reading Drawings — **Fall 2011-Spring 2013**

- Participated in classroom *Revit l*essons and guided students in developing construction documents
- Worked proactively to solve problems with students' *Revit* models
- Created grading rubrics and graded homework, projects, and quizzes

Relevant Course Work

Design of Steel and Structures I & II	Design of Concrete Structures I & II	Indeterminate Structures
Design of Wood Structures	Design of Masonry Structures	Geotechnical Engineering
Computer Modeling of Building Structures	Building Performance Failures and Forensics	Building Enclosure Science
Analysis and Design of Steel Connections	Historical Methods of Structural Analysis	

Course Projects

Design of Steel and Wood Structures

- Worked with a team to redesign a two-story wood structure using steel, and a two story steel structure using wood
- Focus was on understanding why one structural material may be chosen over another
- Project topics included code analysis, load calculation, steel member and column design, bending moment capacity, unbraced length, tension member design, steel connections, and dimension lumber and GLU-LAM design

Architectural Design Studio

- Worked with a team to design a mixed-use complex that would provide luxury hotel rooms, retail/food, and underground cinemas and parking in downtown State College for returning Penn State alumni.
- Designed preliminary exposed upper steel structure using basic span-to-depth ratios. Also considered designs for lighting systems, day lighting, MEP systems, and sustainability.
- Project research included zoning, IBC, ADA, LEED/sustainability, and environmental and urban considerations.
- Final project was awarded second place in final four project competition.

Computer Skills

SAP2000 ETABS RISA STAAD Revit 2013 Revit Architecture Revit MEP Excel PowerPoint

College Honors & Activities

Student Society of Architectural Engineers	Structural Engineers Association	E-house Social Committee
Alpha Lambda Delta Honor Society	Dean's List, Fall 2009 – Spring 2013	Golden Key Honor Society

Hobbies & Interests

Fantasy football, fantasy hockey, hunting, video games, and Dungeons and Dragons