Statement of Purpose

Name:  First Last  January 4, 2010  Civil Engineering (Geotechnical specialty)

Currently, I am enrolled as a senior at the University of Missouri. I will graduate in May 2010 with a Bachelor’s of Science degree in Civil Engineering. During my four-year college career, I have gained knowledge in the classroom, as a research assistant working with professors, and through internships with professional companies. During these four years, I have been an active leader in several student organizations, including leading an ASCE competition team for two years.

Many factors have influenced my decision of pursuing a Master’s of Science degree in Civil Engineering with an emphasis in Geotechnical Engineering. Early in my undergraduate career, Dr. Bill Brown, then a Doctoral candidate, acted as a mentor, giving me insight into many aspects of the Geotechnical field. In my junior year, I enrolled in the Honors Research Program and began working with Dr. Greg Greene on a project to determine resistance factors for Load and Resistance Factor Design (LRFD) for the Missouri Department of Transportation. I developed a program in Matlab that calculates the resistance factors used to determine the total capacity of a drilled shaft. The program’s model allows input for the varying types of soils located within the state of Missouri.

This past summer, I worked as an intern for the engineering firm BigStructures, headquartered in the Kansas City Metropolitan Area. During the three month internship, I worked in the Geotechnical Department within the Energy Division. As an intern, I worked on many projects, broadening my knowledge of the field. While working on a Six Sigma project I used LPile to improve the analyses so that they better represented actual results taken in the field. This objective helped to lower costs and remove unwarranted conservative measures. The highlight of the summer was when I went to Southern California, for three weeks, to work with a drilling crew classifying soils for a renewable energy project.

As an organization leader, I have had many opportunities to demonstrate to others why engineering plays an important role in the progression of society. I was the president of the concrete canoe team during my sophomore and junior years; during that time I gave many presentations educating others about how concrete canoes are designed and constructed to make a lightweight canoe that is buoyant and practical for racing purposes. During my junior year, Dr. Rick Red offered the team and me the opportunity to conduct hands-on concrete experiments in the laboratory with middle school students. These interactions have given me the passion for education as an instructor which I can expand upon in graduate school.

After completion of a Master’s of Science degree, I would like to pursue a career with a consulting engineering firm, creating solutions for Geotechnical problems and obtaining my Professional Engineer’s License. After gaining professional experience in the consulting world, I will have the skills I believe essential to return to school to further my education with a Doctoral degree and possibly remain in the academic field conducting research and instructing future civil engineers.
1. One-page Statement of Purpose is strongly encouraged. Statements must not exceed 1.5 pages in length.

2. Format: 12 point Times New Roman font, 1-inch margin on all sides, 1.5 line spacing

3. Address the following in the Statement of Purpose:
   a. First paragraph: Introduce yourself, provide a brief background and state your immediate career goal/objective
   b. Second paragraph: Explain what led you to your interest in specific studies.
   c. Third paragraph: If applicable, provide a brief description of your engineering practice, e.g., jobs, internships, etc.
   d. Fourth paragraph: Briefly describe any other experiences that either helped you to decide on graduate studies in your designated area or helped to prepare you for graduate studies.
   e. Closing paragraph: Very briefly describe your long-term career goal(s).