Summary
While at Ponts et Chaussées, I worked under the direct advisement of Dr. Matthieu Vandamme investigating the existence of a phenomena called critical saturation and learning a field of physics called Poromechanics. The outcomes of my summer included a probabilistic model that will help further my doctoral research and aided in a deeper understanding of the fundamental physics behind the freezing-and-thawing of porous materials. Having the opportunity to take part in the "Gateways to France" program not only provided an excellent opportunity to collaborate with highly renown researchers in my field but also exposed me to new perspectives on mentoring and educational systems that will help inform my post-graduate study plans.

Fun Cultural Experience
Attending the Fête de la Musique in the Latin Quarter in Paris was likely the highlight of my trip. Despite that the fête now happens across the world, the festival was originally conceptualized and implemented in Paris in the early 1980s to encourage people to simply "make music." Musicians ranging from individuals who learned the recorder in grade school to up-and-coming garage bands and well-known artists fill the streets of Paris whenever and wherever they'd like - the city of lights becomes the city of music for a night!

Relation to Your Major
My internship was directly related to my doctoral research on the freezing-and-thawing of porous construction materials, focusing specifically on concrete, and the use of poromechanics to model the material's response. The poromechanical model, which was developed at Ponts et Chaussées by Dr. Olivier Coussy, is a very fundamental way to approach the problem and understand the governing parameters behind the deleterious phenomena. Ultimately, our goal is to identify key parameters for engineers to specify to aid in better predictions of the service life of concrete infrastructure.