I started out as an intern to hire from August 2012 to May 2013 at which time I was officially hired on as a quoting engineer and after I graduated I transitioned into design. 100% of time has been spent in engineering.  
  
I have to determine vertical and lateral loadings for buildings. I determine appropriate load paths for each structure and design each project per code. At my employment we design buildings in both The USA and Canada primarily so I have to be knowledgeable in both sets of Code. Most of the jobs that I have worked on last anywhere between a week or two and up to around 6+ months of design time, depending on size and intensity. I also work closely with the detailers to assure that each structure is detailed and fabricated per design.

For the following projects I was either the only engineer or the lead engineer in charge of the project from start to finish. The design time is from start of design time to shipping date, I also work with the field if any issues come up during erection of the structure.   
  
NAU Center for Aquatics and Tennis (April 2014 - August 2014) - This was for Northern Arizona University and used Ordinary Moment Frames. I analyzed each frame and designed all primary and secondary members for the structure.  
  
Harris Thermal Manufacturing (March 2014 - August 2014) - This job is located in Montana and used Ordinary Moment Frames. It also has (4) 30 Ton cranes. I analyzed all of the frames bracing with crane systems. I designed all primary and secondary member for the structure.  
  
Bedrock Building B and D (October 2014 - March 2017) - This Project has a future mezzanine (story) which required the use of Intermediate Moment Frames. I calculated the fundamental period of each frame to determine the period of the structure. I then analyzed and designed each frame using it's period. I designed all primary and secondary member for the structure.  
  
  
Audi Showroom (December 2014 - March 2015) This project had a curved mezzanine and was in California. The structure also required the use of Special Moment Frames. I analyzed and designed all of the frames. I also designed all of the special bracing by hand that goes with SMF structures. I used some 3D software to help analyze and design the mezzanine. I designed all primary and secondary member for the structure.  
  
  
Claremont Colony (August 2015 - December 2015) - This project had Ordinary Moment Frames with roof joists instead of purlins. I had to analyze each frame and do some additional checks for the flanges bending force they see due to the joists. I designed all primary and secondary member for the structure.  
  
  
1508 B ChandlerH (October 2015 - February 2016) - This project is an elementary school in Arizona that has 2 stories and used shear walls for the resisting system. I analyzed the mezzanines (stories) with a 3D software program. I also designed the diaphragms of each level by hand using the IAPMO Report I had to coordinate with the Engineer of Record to get the proper loadings into the shear walls and come up with connections to transfer the loadings as well. It had 12 buildings that were all next to each other that I had to design for sharing loads or provide seismic separation. I designed all primary and secondary member for the structure.  
  
  
Real Soccer Office / Team Rooms (Phase C) (May 2016 - September 2016) - This project is for the professional soccer team in Utah. This project was broken up into 3 phases for ease of design. Phase C is a 3 story building. It utilizes Special Concentric Braced Frames as the resisting system. I used a 3D modeling software to design the entire project. I also performed several hand check for the SCBF's. I had to create additional models to analyze different parts of the structure do to some software limits.  
  
King's Chapel - (October 2016 - July 2017)- This project is a 2 story building in Alaska. It utilizes Buckling Restrained Braces for the resisting system. I analyzed and designed the frames and coordinated with the BRB manufacturer to design the braces. I performed the checks to verify beams and columns are adequate using design software. I also designed the braces for bracing the BRB system. I used 2 different kinds of 3D modeling software on this project to help with the analysis and design.