Software Skills:

- Experience with RELAP5-3D Version 2.4.2, a code designed by the Idaho National Lab for best-estimate transient simulations of light water reactor systems during postulated accidents, for thermal hydraulics safety analyses.
- Experience with applications of MATLAB for use in various applications, including thermodynamics simulations, neutronics simulations, fluid simulations, and material properties analyses.
- Experience with applications of SolidWorks.
- Exposure to CASMO, and ORIGEN-ARP (SCALE 6).
- Exposure to LabVIEW as it pertains to the operations of a test facility.

Quality Assurance Background

- 1.5 years experience as a Research Assistant on an Nuclear Quality Assurance-1 (NQA-1) compliant test facility.
    - Experience with training regarding NQA-1, 10 CFR 50 Appendix B, and 10 CFR 21.
    - Experience with quality documentation authorship and review.
    - Experience with vendor communication, ordering, and documentation.

Accomplishments and Awards:

- Presidential Scholar Award, Oregon State University, 2010-2011 academic year.
- NRC academic scholarship, 2010-2011 academic year.
- Vice-Chair of the OSU NE/RHP Alpha Nu Sigma Honor Society, 2012-2013 academic year.
- Volunteer recognition by the OSU NE/RHP department for services including performing Radiation Center tours and for various public speaking services, 2010-2012 academic years.
- Second place Senior Design Project Award, OSU NE/RHP, for the project entitled “Design and Simulation of the High Flux Isotope Reactor Hydraulic Flow Test Element: Spatially Resolved Analysis,” 2010-2011 academic year.

Publications:

- Byfield, P., Marcum, W., Reese, S., “Steady State Thermal Hydraulic Analysis of a Molybdenum Production Element for Implementation in TRIGA® Reactors,” submitted January, 2013 for the American Nuclear Society: 2013 Annual Meeting.