## Anna Case

Education Missouri University of Science and Technology (Missouri S&T) Dec 2019 **B.S.** Electrical Engineering GPA: 3.35/4.0 Missouri S&T - Satellite Research Team (M-SAT) 05/2018 - 05/2019 Experience **Program Manager** Rolla, MO • Managed day to day operations for the NS-8 mission • Handled FOUO information control through the AFRL's VDL system • Led auditing and licensing processes • Directed lab managers, team historians, and webmasters 05/2017 - 05/2019 RF Communications Lead • Performed a trade study, antenna design, link budget, data budget, and power Rolla, MO • Implemented custom waveforms for best on-demand performance via a dynamic link budget • Lead radio integration and simulated communications testing Served as lab manager • Collaborated with Georgia Tech for ground station networking Applied Microwave Non-Destructive Testing Lab Research 03/2018 - Present Research Assistant Rolla, MO • Developed synthetic aperture algorithms for post-processing data using MATLAB • Used vector network analyzers for material characterization • Analyzed steel for cracks and deformations • Used CST to analyze antennas in high temperature environments • Back-propagated measurements to simultaneously find dielectric constant and Researched the effects of backscatter and downsampling on different sample types NASA-Missouri Space Grant Consortium 10/2017 - 04/2018 Undergraduate Research Intern Rolla, MO Aimed to increase performance and reliability of software defined radios deployed on CubeSat missions Worked with NASA STRS architecture to understand standardization efforts and promote responsible spectrum management Used MATLAB to run link performance analysis in dynamic environments based on STK simulations Societies American Society of Nondestructive Testing - Member Institute of Electrical and Electronics Engineers – Vice President (2018-2019) Amateur Radio Club (W0EEE) – Member (KE0MLM) Publications • Case, A., M.T. Ghasr and R. Zoughi, "Accurate & Field-Deployable Microwave Nondestructive Evaluation of Ablatives, Final Report, Texas Research Institute at Austin (TRI/Austin), p. 23, January 2019. • Case, A. "Software Defined Radio Methodologies for CubeSat Reliability," 27th Annual NASA - Missouri Space Grant Consortium. • Case, A. and Kosbar, K. "Communication Systems for CubeSat Missions," International Telemetering Conference Proceedings, Volume 54 (2018). In: International Telemetering Conference. International Foundation for Telemetering.

References

Available upon request.