Emily King

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EDUCATION Master of Science in Electrical and Computer Engineering Expected Fall 2023 University of Oklahoma GPA: 3.33 May 2020 **Bachelor of Science in Electrical Engineering Honors College Degree** Oklahoma State University, Stillwater, OK **GPA: 3.5 THESIS** Miniaturizing the Quasi-Isotropic Low Size, Weight, & Power Ongoing Tag for Remotely Tracking Birds using Weather Radar Research Advisor: Dr. Jessica Ruyle Curve-Folded Dipole Antenna, operating at 2.85 GHz • Integration with Hybrid RFID tracking device Desired bandwidth of 2.7 GHz – 3.0 GHz, WSR-88D network Designed and simulated in Ansys HFSS **PROJECTS** Research - Miniaturize CFDA for SUAS Ongoing • Coauthored with Taylor A. Poydence, "Quasi-Isootropic Curved Folded Dipole", to be submitted to IEEE Antennas and Wireless Propagation Letters Strategically capacitively loading antenna structure to miniaturize physical size and maintain electrical length Analyze effects of miniaturization on radar detectable range, radiation patterns, and quality factor/bandwidth Antenna Applications Symposium - 2022 Fall 2022 Robert Allerton Park, Monticello, Illinois Presented on the effects of capacitive loading on electrically small antennas Spring 2022 Antennas Final Project - TV Antenna Determine requirements to receive a minimum of 17 channels (received 70) broadcasted from Oklahoma City Circular, Log-Periodic Tooth Antenna **EMPLOYMENT** Air Force Civilian Service: PALACE Acquire (PAQ) Program, June 2020 – Present **HISTORY** 556 SWES/MXDPBB, 76th SWEG, Tinker AFB Electronics Engineer, GS-0855-11 Air Force Civilian Service: Premier College Internship Program, June 2019 - August 2019 76th SWEG, Tinker AFB Student Trainee (Electronics Engineer), GS-0899-04 **SKILLS** Ansys HFSS, Altium Designer, MATLAB, PADS Logic, PADS Layout, Autodesk Inventor, PSPICE, ADS UNDERGRADUATE Inducted into HKN Spring 2019, IEEE President 2019-2020, IEEE Secretary 2018-2019, Stout Hall **INVOLVEMENT** Community Council, Honors College Student Association, Alpha Omega Epsilon 2016-2020, Cowboy Marching Band 2016