

Kensi Hargraves

(405) 570-5434 | Kensi.Hargraves@ngc.com | Oklahoma City, OK
Security Clearance: DoD Secret

TECHNICAL SKILLS

RF MEASUREMENTS

Network/spectrum analyzers
Far-field anechoic chamber

MODELING AND SIMULATION

Ansys HFSS | FEKO
AWR MW Office | ADS

PROGRAMMING

C++ | C | ADA
MATLAB

PROFESSIONAL EXPERIENCE

Survivability Engineer

March 2023 – Present

Northrop Grumman Aerospace Systems | Oklahoma City, OK

- Familiarity with a variety of computational electromagnetics tools
- Review Design Change Notices (DCN) for LO concerns and recommend actions or approve changes
- Develop radio frequency test procedures to qualify materials or designs to platform requirements
- Established Jira and Confluence in a project and document management effort
- Develop candidate forms and quad charts to present to the customer

Electronics Engineer, NH-0855-03

May 2019 – March 2023

Air Force Civilian Service | Tinker AFB, OK

Software maintenance and development engineer for E-3 AWACS radar system with 76 SWEG

- Perform and document analysis of software change requests by finding root cause, evaluating corrective actions, and recommending the most effective solution
- Technical writing, including image and table creation, for engineering documentation, design reports, and to update technical orders (TO)
- Use test equipment (spectrum analyzer, oscilloscope, multimeter, variable attenuators, etc) in running test scripts or to troubleshoot, calibrate, and maintain lab's radar equipment.

Student Intern Electronics Engineer, GS-0855-05

May 2018 – August 2018

Air Force Civilian Service | Tinker AFB, OK

Completed multi-week projects related to workload as I rotated through different squadrons in the 76 SWEG

RESEARCH EXPERIENCE

Graduate Research Assistant

August 2020 – Present

Advanced Radar Research Center at the University of Oklahoma | Norman, OK

Advisor: Dr. JE Ruyle

Thesis topic: Miniaturization of a patch antenna utilizing a ferrite loaded substrate

- Utilize antenna engineering principles, gain experience with radiofrequency simulation, lab equipment, and documentation
 - Modeling and simulation: HFSS, ADS, MATLAB
 - Fabrication: CAD, laser mill, & soldering
 - Testing: Network analyzer, far-field anechoic chamber, standard gain horn, oscilloscope
 - Validation: Plot simulation data vs measured results (MATLAB), computational electromagnetic modeling
 - Documentation: Compose and format documentation in LaTeX using Overleaf compiler

Undergraduate Research Assistant

January 2018 – May 2019

Advanced Radar Research Center at the University of Oklahoma | Norman, OK

- Assisted with modeling & optimization of a frequency reconfigurable antenna using transmission line theory

EDUCATION & CREDENTIALS

MS Electrical Engineering, University of Oklahoma | Norman, OK

pending thesis work

Acquisition Engineering Certification - Level I (2021) and Foundational (2022)

2022

BS Electrical Engineering, University of Oklahoma | Norman, OK

2019