### Jonathan Knowles

Schoole of Electrical and Computer Engineering Jonathan.M.Knowles-1@ou.edu

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Education

Master of Science, Electrical and Computer Engineering

December 2021

University of Oklahoma, Norman, OK

Bachelor of Science, Electrical Engineering

December 2020

University of Oklahoma, Norman, OK

Minor in Mathematics Overall GPA: 3.93/4.0

Associates of Science, Engineering

May 2018

Oklahoma City Community College, Oklahoma City, OK

## Experience

### Advanced Radar Research Center, UGRA

Spring 2019 – Present

- Performed Coplanar Waveguide optimization using Ansys HFSS
- Designed a RF PCB using Autodesk EAGLE
- Designed a 1 GHz bandpass filter
- Designed a 15 GHz patch antenna

## NASA Goddard Space Flight Center, Engineering Intern

Summer 2020

- Assisted in the design and testing of a radar system by creating a model of a radar transceiver and frequency conversion device using Keysight ADS.
  - Optimized tuning of a SSPA

# National Transportation Safety Board, Intern

Summer 2017

- Worked with several professionals to repair the Highway Safety Crash Database
- Assisted in the Buloxi, Mississippi investigation
- Summarized Alcohol-Impaired Driving for the Road to Zero Project

### American Machine and Tool, CNC Machinist

2012 - 2017

- Used MasterCAM to write programs to mill and turn parts to specifications
- Used VTL's and milling machines to manually machine parts to specifications

## Honors and Awards

- Deans Honor Roll
- Cobell Scholarship recipient
- Intel Growing the Legacy Scholarship recipient

## Skills and Coursework

- Software: Ansys HFSS, MATLAB, Keysight ADS, Altium, Autodesk EAGLE, Multisim
- Hardware: Oscilloscope, Network Analyzer, Soldering
- Programming Languages: C/C++, Python
- Coursework: EM Fields and Wave Propagation, Digital Signal Processing, Radar Imaging, RF and

Microwave Circuits, Radar Engineering

### Activities

Co-founder and Secretary: SEDS OU Member: IEEE HKN
Treasurer: OCCC Engineering Club Member: AISES