Email: tangellaz@gmail.com

Tyler K. Angell

Tucson, Arizona

Summary

RF Electrical Engineer II with 2.5 years experience in RF circuit design and analysis, leadership experience, research, and project management. Experience working in Agile CCA build environment. Looking to get more experience in the field of software engineering.

Education

Master of Science in Engineering, Electrical Engineering **May 2018**
Bachelor of Science in Engineering, Electrical Engineering **May 2017**
Barrett, the Honors College
Arizona State University, Tempe, Arizona GPA: 3.95

Relevant Coursework

◊ Python for Engineers
◊ Numerical Methods using MATLAB
◊ C++, Intro to Programming
◊ UX/UI Design
◊ Hardware Design Language Programming Logic (VHDL)
◊ Data Mining & Machine Learning

Professional Skills

Technical
◊ Python
◊ C++/MATLAB
◊ JavaScript, HTML, CSS
◊ VBA
◊ LabVIEW
◊ Machine Learning
◊ PostgreSQL
◊ GitHub

Lab
◊ RF Test & Automation
◊ Oscilloscope
◊ Soldering
◊ CCA Design and Fabrication
◊ Microsoft Excel (Pivot Tables)
◊ Reports and Presentations
◊ Data Analysis
◊ Failure Analysis

Work Experience

Raytheon, Tucson, Arizona **June 2018 – Present**
RF Electrical Engineer II
► Designed and wrote testing automation scripts in LabVIEW.
► Wrote VBA script to find discrepancies in EDM data.
► Facilitated system level design of RF circuit cards.
► Designed etched components and performed RF analysis using HFSS.

General Dynamics, Scottsdale, Arizona **Aug 2017 – April 2018**
RF Engineering Intern
► Bread boarding RF components for failure analysis and characterization.
► Used HFSS to design and simulate divider, coupler, filter, and connector transitions.

Raytheon, Tucson, Arizona **May 2017 – Aug 2017**
Graduate RF Engineering Intern
► Assisted in design and implementation of RF filters.
► Used HFSS Statistical Analysis to run Monte Carlo on filters.
► Performed RF testing for system performance and derated components for review.

Projects

Time-Series Forecasting using LSTM Networks and Prophet
Python for Engineers – Final Deliverable (available upon request)
► Used python and machine learning to compare forecasting algorithms: LSTM & Prophet.
► Developed novel method for LSTM model to predict upon its previous predicted value (forecast).

Simulating Effects of Probe Placement on Calibration Accuracy using TRL
Millimeter Wave & THz Measurements – Final Deliverable (available upon request)
► Used HFSS to model calibration standards for thru, reflect, load (TRL).
► Used Python to introduce error (Gaussian noise) simulating probe placement error and plot results.
► Successfully showed percent error increases exponentially as a function of probe displacement.

RFID Lock using MSP4332P401R and TRF7970A Booster Pack
Texas Instruments Internship Design Challenge
► Used C++ to develop state machine for RFID Lock.
► Discovered bug in TI firmware release and showed failure mode in RFID reader.

Ultra-Smart-Brain Full Stack Web App
Udemy Web Development Course Project – https://ultra-smart-brain-redux.herokuapp.com/
► Used React and Redux to make face recognition application using Clarifai's API.
► Created a database using PostgreSQL to store user information and stats.