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Tyler Angell

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Summary

Self-taught web developer since summer 2019 while working full-time as an RF Electrical Engineer II. Experience as product owner/lead and working with large codebases, research, and Agile CCA build environment. Looking for a developer role to build upon current programming experience and problem-solving skills.

Work Experience

Full Stack Web Developer Jan 2022 – Present
Self-employed/Freelance | Phoenix, AZ
► Developed websites using Next.JS (React with SSR).
► Built E-Commerce website: Redux Toolkit for shopping cart, Paypal Standard Checkout, and PostgreSQL.
► Designed wireframes for websites using Figma.
► Drafted requirements from client consultations.

RF Electrcial Engineer II June 2018 – Jan 2022
Raytheon | Tucson, AZ
► Used Python with PyVisa to automate test equipment and evaluate ADC/DAC.
► Updated legacy codebase in MATLAB for new hardware.
► Designed and wrote testing automation scripts in LabVIEW.
► Wrote VBA script to find discrepancies in EDM (Raytheon parts list) data.

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

Education

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

Relevant Coursework

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

Projects

Time-Series Forecasting using LSTM Networks and Prophet
Python for Engineers – Final Deliverable (https://tangellaz.github.io/LSTM-vs-Prophet/)
► 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 (https://tangellaz.github.io/THz-project/)
► 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.

Professional Skills

◊ React, Next.JS
◊ JavaScript, HTML, CSS
◊ Figma
◊ PostgreSQL
◊ HTTP Methods
◊ GitHub
◊ Python
◊ Machine Learning
◊ C++/MATLAB
◊ LabVIEW
◊ VBA
◊ HW Test & Automation