ick Duncan

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EXPERIENCE

FANHOUSE Remote

Software Engineer - Mobile App Lead

May 2022 – Present

- Developed 7 new mobile app features using Flutter and designed new backend API endpoints using TypeScript
- Refactored mobile codebase to improve separation of concerns, build reusable components, and better app performance
- Cultivated consistent, quality app code development by owning app deploy processes and managing 2 direct reports
- Drove growth of engineering team by designing interview questions and interviewing prospective candidates

RAYTHEON TECHNOLOGIES

Engineering Leadership Development Program Associate

July 2020 - May 2022

PRATT & WHITNEY

Remote

Software Developer - Engine Health Management

October 2021 - May 2022

- Led front-end development of a dashboard to display key trends from over 2000 engines' flight data to customers
- Established user requirements and gathered preliminary customer feedback through regular customer interviews
- Developed an automated script to evaluate the accuracy of machine learning prediction data against reported data
- Served as Scrum Master for Agile scrum events, like product increment planning, and prioritized product backlog

Project Engineer

June 2021 – October 2021

- Led testing and qualification (DO-160, cycle, abuse, software) of touchless kits to retrofit Boeing 737 lavatories
- Managed development and release processes for over 30 new product kits for different lavatory positions
- Supported certification efforts to satisfy customer and FAA requirements while meeting schedule demands

Associate Project Manager

January 2021 – June 2021

- Owned testing activities for a \$4M product development project undergoing ambitious schedule compression
- Managed budget and schedule risk through collaboration with internal stakeholders and external vendors
- Spearheaded supply chain coordination to ensure over 500 parts were procured and on-dock per program schedule
- Conducted user experience trials to study customer behaviors and fine tune 5 touchless lavatory components

PRATT & WHITNEY

Oklahoma City, OK

Repair Design Engineer

July 2020 – December 2020

- Authored 5 technical repair procedures to allow for the replacement of unserviceable parts on the F135 jet engine
- Coordinated cross-functional teams to gather technical constraints and requirements while designing repairs
- Prepared new tools for presentation to military customers by running 2 dry runs and correcting tooling procedures
- Inspected 30 individual parts from the F135 engine to qualify damage and determine the parts' serviceability

BOEING Structures Engineering Intern

North Charleston, SC May 2019 – August 2019

- Designed a new part (design change) that eliminated an interference issue affecting 33% of 787s during assembly
- Collaborated with a supplier in Asia to retrofit inventory of the previous design in order to reduce cost of the change
- Ensured flight safety for a composite airplane by correcting calculation errors in 6 released stress analysis packages

JOHN DEERE

Fuguay-Varina, NC

Product Engineering Intern

May 2018 – August 2018

- Increased efficiency of a lawnmower's hydraulic cooling system by as much as 18% through a complete redesign
- Designed 2 tools to identify misplaced hydraulic fittings to lower risk of technician error during assembly

PROJECTS

PLUTUS RECEIPTS

Champaign, IL / Remote

GPA: 3.80/4.00

Co-founder

December 2019 – December 2022

- Developed a mobile Flutter app (iOS and Android) as an MVP using Google Firebase and AWS on the back end
- Designed UI/UX for the app considering Material UI and iOS design principles and customer discovery interviews
- Partnered with Eden Reforestation Projects to plant trees around the world as users collect digital receipts

EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Bachelor of Science in Mechanical Engineering with High Honors

SKILLS AND CERTIFICATIONS

- Languages: Python, Dart, TypeScript, SQL, HTML, CSS, MATLAB
- Tools: Jira, Confluence, Google Analytics, Slack, Oracle, Firebase, AWS, REST APIs, Flutter, GitHub, Excel, Tableau
- Certifications: SAFe 5 Scrum Master (Scaled Agile), Azure Fundamentals (Microsoft)