# **NOLAN SMURRO**

Seattle, WA ♦ (206) 249-9346 ♦ nolan@smurro.com

## **TECHNICAL STRENGTHS**

Languages Python, SQL, R, Latex, HTML, CSS

Skills Machine Learning, Neural Networks, Predictive Modeling, Visualization, NLP

Tools Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, Git, TensorFlow, Tableau, MatLab

### **EXPERIENCE**

# **General Assembly**

September 2023 - December 2023

Data Science Immersive

- · Successfully completed 500+ hours of expert led instruction in Data Science Fundamentals, Statistical Modeling, Machine Learning, Natural Language Processing, and the industry's most in demand technologies.
- · Photo Classification Neural Network Trained a convolutional neural network to classify between film and digital photographs with 85% accuracy and deployed a Streamlit app with Grad-CAM visualizations.
- · Reddit Post Binary Classification Model Created a classification model utilizing Natural Language Processing (NLP) to categorize user posts as houseplant or gardening related content based on post title language with 85% accuracy to be applied to social media platforms to gain insights for advertising campaigns.

# BrickRed Systems (Microsoft Research)

September 2022 - July 2023

Mechanical Design Engineer

Redmond, WA

- · Led a cross-functional team within the Microsoft Research Hardware Lab, providing electrical and mechanical engineering alongside rapid prototyping services to support Microsoft Research priorities across 10+ projects.
- · Collaborated with entomologists, data scientists, and engineers to integrate 3D-printed components into Microsoft Project Premonition's robotic sensing platform which detects, captures, collects, aggregates, and analyzes virus data from mosquitos to predict emerging outbreaks.
- Integrated Power Automate flows with Microsoft Dataverse and Approvals to improve billable hour tracking and case approval workflows within the Microsoft Research Hardware Lab Dynamics 365 CRM environment.

#### **Smurro Design**

September 2020 - September 2022

Freelance Mechanical Design Engineer

Seattle, WA

- · Prepared CAD Models, Manufacturing Drawings, and Technical Documentation for FAA-PMA manufacturers
- · Organized FAA-PMA part certifications to address structural Airworthiness Directive AD2020-18-01 related to doorpost bulkhead and wing strut fitting reinforcement affecting 14,653 registered aircraft in the U.S.

## The Landing Gear Works

February 2017 - August 2020

Mechanical Engineer

Renton, WA

- · Coordinated certifications and served as point of contact with the FAA Aircraft Certification Office (ACO) and the FAA Manufacturing Inspection District Office (MIDO) for 6 unique STC approvals including titanium main landing gear and tailwheel assemblies for Cessna single-engine aircraft.
- · Drafted engineering technical documentation utilizing MS Excel and LaTeX to support FAA certifications
- · Oversaw data control/ drawing revisions and FAA minor change submissions for 4 STC/PMA certifications

## **EDUCATION**

### **General Assembly**

Data Science Immersive

#### **Seattle Pacific University**

B.S. Mechanical Engineering (Degree to be awarded Spring 2024)