# VICTOR CHANG | DATA ANALYST

Results-driven data analyst with a background in engineering and military intelligence, skilled in data analysis and software development. Proven ability to build and deploy predictive models and extract actionable insights from large datasets. Adept at cross-functional collaboration in Agile environments, with a strong record of delivering dashboards, reports, and web applications to support data-informed decision-making. Top Secret Clearance with SCI. Actively seeking remote or hybrid data analyst or data scientist roles in mission-driven teams, with a preference for opportunities in or around Flushing, Michigan.

### **TECHNICAL SKILLS**

Programming & Analysis | Python, SQL (PostgreSQL, MySQL, SQLite), Pandas, NumPy, Excel

Data Visualization & Dashboards | Matplotlib, Seaborn, Plotly, Power BI, Tableau, Streamlit, Dash

Machine Learning & Modeling | Scikit-learn, Statsmodels, XGBoost, TensorFlow, PyTorch, Statsbombpy

Web & DevOps | FastAPI, React, HTML5, Tailwind CSS, Docker, Render, Git, GitHub, GitLab, Nginx

Workflow & Tools | Agile Methodology, Version Control (Git), Yarn, Npm, Vite

#### **EDUCATION**

Masters, Business Administration | Regent University - 2026

Data Development Immersive Boot-camp | Galvanize, Inc - 2025

Bachelor of Science, Mechanical Engineering | University of South Florida - 2019

Bachelor of Science, Biology | University of South Florida - 2016

#### **CERTIFICATIONS**

Galvanize Data Analytics Immersive Certificate
IBM Data Analysis with Python Certificate
NUARI 40-Hour Data Science Course

#### **PROJECTS**

#### English Premier League & La Liga | Prediction App

Built and deployed an interactive machine learning application using 5 years of historical data (SportMonks, StatsBombpy) to predict match outcomes and goal probabilities. Integrated weather, venue, and player metrics. Achieved ~63% match outcome prediction accuracy and ~54% goal event prediction accuracy. Deployed application via Streamlit and FastAPI on Render allowing users to simulate outcome scenarios and draw tactical insights from time-based data.

#### **English Premier League | Goal Scoring Analysis**

Analyzed 30K+ soccer match events using Python, SQL, and Pandas. Developed a repeatable data processing workflow to clean, transform, and integrate data from multiple sources using SQLite for structured storage and querying. Engineered features and visualized trends with Matplotlib and mplsoccer. Identified tactical insights like high probability scoring moments and underused scoring attempt zones.

#### PROFESSIONAL EXPERIENCE

# US Army Special Operations Command – Fayetteville, NC Data Analyst

**2025 – Present** 

- Led structured brainstorming sessions with a cross-functional team to define application goals, design user flows, and prototype UI for a collaborative 3D printing model-sharing platform, reducing errors in web app production.
- Partnered with software developers to integrate advanced data analytics features, including interactive dashboards and a spam detection system for image submissions and forum discussion, allowing users to visualize their interactions and admins to track application performance metrics.
- Contributed to full-stack web development, integrating PostgreSQL, React, TypeScript, and Tailwind CSS to build a scalable platform, aimed at reducing redundancy in 3D printing workflows across U.S. Army divisions, improving cross-unit model reuse.
- Designed and produced 20+ performance-focused data visualizations using Seaborn, Matplotlib, and mplsoccer, resulting in clearer identification of usage patterns and system inefficiencies, driving iterative improvements to platform performance.

# US Army Psychological Operations 1<sup>st</sup> Battalion - Fayetteville, NC Psychological Operations Specialist

2022 - 2025

- Streamlined personnel tracking and reporting for a 200+ member unit by automating workflows, improving data accuracy and reducing administrative time by 50%.
- Partnered with leadership to analyze and optimize travel logistics, identifying cost-saving patterns that reduced expenses by 20% and saved \$10K+ per mission.
- Developed data-driven tools in Excel and survey platforms to support decision-making for humanitarian programs benefiting 1,000+ families.
- Analyzed media engagement data across press and social platforms to guide psychological operations strategies, increasing outreach effectiveness by 60%.

## CaptiveAire Systems – Orlando, FL Technical Sales Engineer

2020 - 2021

- Developed customized kitchen hood and ductwork layouts using CAD models, aligning HVAC system designs with architectural plans, ensuring compliance with electrical and airflow specifications.
- Coordinated with design engineers, contractors, and installation teams to troubleshoot technical issues, verify field requirements, and ensure timely, accurate product delivery.
- Maintained strong client relationships through responsive support and solution-driven recommendations resulting in more efficient HVAC components that improved performance and reduced long-term costs.