# Gustavo F. Beltra

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#### **Objective:**

Engineering Technology professional with a strong background in CAD modeling, statistical analysis, and machine learning. Seeking to leverage analytical problem-solving, project management, and technical expertise in a role that advances innovative solutions and efficiency improvements.

# Education:

# University of West Florida (UWF), Pensacola, FL Bachelor of Science in Engineering Technology, December 2021

- Honors & Recognition: Dean's List, President's List
- Key Technical Coursework:
  - Advanced Mathematics (Analytic Geometry & Calculus III, Differential Equations)
  - Engineering & Design (CAD Modeling, Professional Ethics for Engineers, Mechatronic Systems & Labs, Capstone Design)
  - Data Analysis & Statistics (Engineering Statistics, Regression Analysis, Supply Chain Logistics)

#### Capstone & Project Work:

- Led the UWF SAE Aero Team to design and produce a remote-controlled aircraft, applying CAD, prototyping, and testing skills.
- Developed a cost-effective road telemetry device for a Capstone project, incorporating design optimization and testing.
- Contributed to kinetic art projects (animatronic, tensegrity sculptures), merging creative concepts with engineering principles.

# Technical Skills:

- CAD & Modeling: SolidWorks, Autodesk Inventor, Autodesk Revit, 3DS Max, Maya, Ansys
- **Programming & Data Analysis:** C++, C#, Python, Swift; MATLAB, SPSS, R Studio
- Machine Learning & Computer Vision: Experience with neural networks, ensemble models, dimensionality reduction (PCA), and model evaluation.
- **Other Skills:** Leadership, teamwork, communication, project management

#### Languages:

- English (Fluent)
- Spanish (Fluent)
- German (Limited Proficiency)

#### **Relevant Experience:**

# Personal Project: Anomaly Detection and Classification in Video (2023)

- Developed a deep learning pipeline for detecting and classifying anomalies (e.g., Abuse, Arson, Robbery) in video sequences.
- Employed pre-extracted video features, ensemble neural networks, and Focal Loss to address class imbalance, achieving ~91% accuracy.
- Integrated PCA for dimensionality reduction, data normalization, and noise augmentation to improve model generalization.
- Highlighted adaptability in experimenting with hyperparameter tuning, cross-validation (Stratified K-Fold), and advanced model ensembling.

# Data Entry Clerk (Part-Time, Remote)

Apex Focus Group Inc. | 2023

- Ensured accurate, confidential data entry with strong attention to detail and timely completion.
- Collaborated with team members to clarify requirements and resolve discrepancies.

#### **Engineering Intern**

*Current Products Corporation, Pensacola, FL* | 2019 – 2020

- Assisted a Professional Engineer in SolidWorks-based product design and assembly modeling.
- Supported manufacturing process research and continuous improvement initiatives.

#### Front End Associate

Army and Air Force Exchange Services, Kaiserslautern, Germany | 2016 – 2017

• Provided customer support, resolved inquiries, and supported loyalty program enrollments.

#### **Key Achievements & Attributes:**

- Demonstrated leadership and collaboration in team-based engineering projects.
- Strong analytical foundation combining engineering principles, advanced mathematics, and data-driven decision-making.
- Committed to continuous learning, staying current with emerging technologies, and delivering consistent, high-quality results.

References: Available upon request