# Angel M Velasquez

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#### **EXPERIENCE**

#### Software Engineer

Ilico Genetics, Pennsylvania

- Designed and implemented efficient and user-friendly systems such as a data table system for batch edits before sending inputs to machine-learning model
- Increased performance of a machine learning batch inference pipeline by 200% by identifying bottlenecks through benchmarking and optimizing model-loading and prediction logic

#### Classroom Technology (CITL) Student Assistant

Lehigh University-LTS, Pennsylvania

- Contributed to adding admin settings to alter information displayed on the Lehigh TRAC program website
- Wrote and maintained documentation on how to use Git with Unity while teaching over workshops about VR/Game development

# **Code School Instructor**

Utah Tech University, Utah

- Developed and taught a 9-week summer program about modern web development. Technologies taught span HTML, CSS, JavaScript, Vue.js, Express.js, and MongoDB
- Mentored students on full stack projects, provided code reviews and debugged student work
- Collaborated with 3 instructors to develop engaging class examples and adapt the curriculum to student feedback

### Virtual Reality Software Developer

Utah Tech Online, Utah,

- Developed 17 multiplayer lab experiences using C# and Unity, enhancing the learning experience for Utah Tech students across 2 courses each semester
- Collaborated with a cross-functional team of 5 developers and 3 artists to design, debug, and develop innovative VR systems
- Optimized online systems, including a render texture save and sync system, increasing performance by over 200%

#### **EDUCATION**

#### **Utah Tech University**

B.S. in Software Engineering — GPA: 3.91

#### **PROJECTS**

#### Lyric Luminary

- Trained a TF-IDF Naive Bayes classifier on over 3 million songs to classify the genre of song lyrics with over a 90% testing accuracy
- Integrate the model into a native desktop application that uses Svelte as a frontend and Go as backend, powered by Wails
- Use model predictions to recommend similar Spotify songs via the Spotify API and allow users to use Genius song links as inputs to pull song lyrics for prediction

#### **Ultimate Fight Predictor**

- Trained a support vector machine on over 3k mixed martial bouts to predict the outcome of a bout
- Created a web scrapper to get data needed to predict bouts
- Created other models using different methods such as voting classification and multilayer perceptron's to compare the performance of different classification methods

# Godot Image Classification

- Trained a convolutional neural network on over 200k images of cats and dogs songs to classify the pet in the image with over a 98% testing accuracy
- Utilize the weights of the network to use during runtime of a Godot project to predict if a image of a dog or cat is visible within the player's point of view

# **TECHNICAL SKILLS**

#### **Programming Languages:** Python, C++, C#, Java, JavaScript, SQL, Bash Libraries and Tools: PyTorch, Sklearn, Pandas, Numpy, TensorFlow, Git, Docker, Tableau, Excel, Linux

#### Python, Sklearn, NumPy, Pandas, BeautifulSoup

May 2023 - August 2024

# Python, Sklearn, Pandas, Go, Svelte

#### Python, PyTorch Godot, OpenCV

Jan 2022 - May 2024

St. George, Utah, USA

September 2024 - May 2025

October 2024 - May 2025

May 2024 - August 2024