Bryant McArthur

bryant0918@gmail.com - (385) 500-7272

<u>www.github.com/bryant0918</u> – <u>www.bryantmcarthur.com</u> – <u>www.linkedin.com/in/bryant-mcarthur</u>

Education

Masters, Computer Science

April 2025

Texas A&M University

College Station, Texas

• GRE: 324

• Reinforcement Learning

Algorithms & Optimization

Software Engineering

April 2023 Provo, Utah

BS, Applied & Computational Mathematics Emphasis (ACME)

Brigham Young University

• Concentration: Linguistics

• Full Academic Scholarship

• GPA: 3.93/4.00 ACT: 35

• Machine Learning

• Natural Language Processing

• Machine Translation

Experience

Head of Machine Learning

Addavox

May 2022 - Present Lehi, Utah

Developed, Customized and Trained Model for Voice Synthesis Retaining Vocal Qualities of Encoded Speech

• Engineered "Lip Sync" Model for Synchronizing Vocal Audio to Visual Mouth Movements in High-Dim Space

Lead Consultant | Founding Partner

January 2022 - Present

Parsha Works

Provo. Utah

- Deployed Full-Stack Event Ticketing Software MVP for \$50,000 in Three Months
- Built Software for Automated, Customized, and Timely Real Estate Leads

Sales Rep Team Lead

April 2020 - September 2021

Moxie Services

• Led the Company Nationwide Consistently in Individual Sales Door-to-Door on a Day-to-Day Basis

• Generated and Responsible for over \$1 Million in Revenue for Moxie

Full-Time Volunteer Representative & Assistant to the President

January 2018 - February 2020

The Church of Jesus Christ of Latter-day Saints

Warsaw. Poland

• Analyzed Statistics and Led Weekly Trainings to Achieve Group Improvement Goals for Entire Mission

Skills

- Proficient in Python, R, git, Ruby, C++, html
- Pytorch, Tensorflow, Pandas, Cuda
- Gradient Descent
- Data Structures
- Unix Shell
- Linear and Nonlinear Analysis

- Statistics
- Multivariable Calculus
- Singular Value Decomposition
- Fourier Analysis, Kalman Filter
- Numerical Linear Algebra
- ODEs, PDE

Relevant Projects

Wildfire Predictions

April 2023

- Analyzed Wildfire Data Using ARIMA, HMM, Kalman Filter, and Prophet Models
- Accurately Predicted When and Where the Next Wildfires will Strike on a Regional Basis

Multilingual Neural Machine Translation Model

March 2022

- Cleaned and Multi-way Aligned Data to Train a Complete MNMT System for Polish, Spanish, Czech, English
- Analyzed Bleu Scores with Corresponding Bilingual Models on Untrained Language Pairs

Speech to Speech Translation Model

February 2022

• Created Pipeline using Automatic Speech Recognition, Text to Text Machine Translation and Foreign Language Speech Synthesizer Models to Recognize Audio input and Output Translated Foreign Speech