Bryant McArthur

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Education

BS, Applied & Computational Mathematics Emphasis (ACME)   **April 2023**
Brigham Young University   *Provo, Utah*

- Emphasis: Linguistics
- GPA: 3.94/4.00
- Relevant Coursework:

- Full Academic Scholarship
- ACT: 35
- GRE: 324

Linear and Nonlinear Analysis	Computation and Optimization
Machine Learning	Multivariable Calculus
Machine Translation	Mathematical Programming
Natural Language Processing	Statistics

Skills

- Proficient in Python, git, C++, Java, html, R
- Gradient Descent
- Data Structures
- Q-Learning
- Unix Shell
- Thompson sampling

- Krylov Subspaces
- A/B Testing
- Singular Value Decomposition
- Fourier Analysis
- Numerical Linear Algebra
- ODEs

Experience

Head of Machine Learning   **May 2022 – Present**
Addavox   *Lehi, Utah*

- Developed, Customized and Trained Model for Voice Synthesis Retaining Vocal Qualities of Encoded Speech
- Implemented Speech and Source Separation with WavLM model

Lead Consultant   **January 2022 – Present**
Parsha Works   *Provo, Utah*

- *Built Software for Automated, Customized, and Timely Real Estate Leads.*
- *Successfully Started and Currently Running My Own Business with Three Other Parteners.*

Sales Rep Team Lead   **April 2020 – September 2021**
Moxie Services   *Dallas, Texas*

- 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
- Directed and Incentivized Team Administratively to Assure Individual and Group Goals were Achieved

Full-Time Volunteer Representative   **January 2018 – February 2020**
The Church of Jesus Christ of Latter-day Saints   *Warsaw, Poland*

- Supervised and Mentored 60 Volunteers to Encourage More Effective Work as Assistant to the President
- Analyzed Team Statistics and Led Weekly Trainings to Achieve Group Improvement Goals

Relevant Projects

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