

# Bryant McArthur

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## Experience

### Head of Machine Learning

May 2022 – Present

Addavox

Lehi, Utah

- Responsible for All ML and AI Models from Model Architecture Design, Data Collection & Processing, and Training
- Implement Model APIs into the Product Pipeline and Oversee Cloud Infrastructure for AI Workers

### Machine Learning Engineer

June 2024 – August 2024

Ditto

Orem, Utah

- Designed and Built Cross-Lingual Prosody Mapping Text-To-Speech Model with Speaker Voice Cloning

### Lead Consultant | Founding Partner | CFO

January 2022 – October 2024

Parsha Works

Provo, Utah

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

### 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

## Education

### Master of Computer Science

December 2024

Texas A&M University

College Station, Texas

- GPA: 3.86/4.00
- Data Mining and Analysis
- Machine Learning Engineering
- Algorithms & Optimization
- Deep Learning, AI & Reinforcement Learning
- Distributed Systems & Cloud Computing

### BS, Applied & Computational Mathematics Emphasis (ACME)

April 2023

Brigham Young University

Provo, Utah

- GPA: 3.93/4.00
- Concentration: Linguistics
- Machine Translation & NLP

## Publications and Projects

### IEEE/CVF WACV 2025 Workshop: AI for Multimedia Forensics and Disinformation Detection

February 28, 2025

- “HFMF: Hierarchical Fusion Meets Multi-Stream Models for Deepfake Detection”

### Low Rank Adaptation

December 2023

- Finetuned Stable Diffusion Model to Generate Custom Pokemon Using Low-Rank Adaptation (LoRA)

### 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

## Skills

- AI, ML, DL
- AWS, Google Cloud Console
- Data Structures
- Numerical Linear Algebra
- Python, R, Ruby, Javascript
- Agentic AI, RAG, LLMs
- Statistics
- ODEs, PDEs
- Pytorch, Tensorflow, Cuda
- Linear and Nonlinear Analysis
- Gradient Descent & Optimization Methods
- Fourier Analysis, Kalman Filter

## Volunteer Work

### Club Officer

January 2024 – April 2025

Texas A&M Men's Soccer

College Station, Texas

- As Elected DK Coordinator: Manage Alumni Fundraising Events, Allocate Financials, Play and Compete with Team

### 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