Bryant McArthur

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Experience

Head of Machine Learning

May 2022 - Present

Addavox

Lehi, Utah

Orem, 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
- Models and Workers Include: Audio Separation, STT, Diarization, MT, TTS, Voice Cloning, Face Detection, Lip Sync

Machine Learning Engineer

June 2024 - August 2024

DittoDub

Designed 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 with Django and MySQL

Built Software for Automated, Customized, and Timely Real Estate Leads Using CronJobs, WebScrapers and OCR

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 Machine Learning Engineering Deep Learning, AI & Reinforcement Learning **Distributed Systems & Cloud Computing**

Data Mining and Analysis Algorithms & Optimization **BS**, Applied & Computational Mathematics Emphasis (ACME)

Brigham Young University

April 2023

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" – ResNet + Vision Transformer **Low Rank Adaptation** December 2023

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

Wildfire Predictions

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

April 2023

- 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	Python, R, Ruby, C++, html	Pytorch, Tensorflow, Cuda
•	AWS, Google Cloud Console	Statistics	Linear and Nonlinear Analysis
•	Data Structures	Multivariable Calculus	Gradient Descent & Optimization Methods
•	Numerical Linear Algebra	ODEs. PDEs	Fourier Analysis, Kalman Filter

Volunteer Work

Club Officer Texas A&M Men's Soccer January 2024 - April 2025

College Station, Texas

• Elected DK Coordinator: Managed Alumni Fundraising Events, Allocated Financials, Competed as Starting CB

Full-Time Volunteer Representative & Assistant to the President

January 2018 - February 2020

The Church of Jesus Christ of Latter-day Saints

Warsaw, Poland