JACOB VALDEZ

Machine Learning Engineer and Researcher

@ jacob.valdez@limboid.ai   📞 +1 469 968 9490   🔗 jacobfv.github.io
🔗 https://github.com/JacobFV   in linkedin.com/in/jacob-f-valdez

EDUCATION

B.S. Computer Science
The University of Texas at Arlington

📅 June 2020 – Present

GPA 3.7/4.0; graduate Aug 2022

A.A.S. in Mathematics
Navarro College

📅 Sept 2014 – May 2018

GPA 3.9/4.0; Dual-credit program; 85 hours taken

EMPLOYMENT

Student Research Assistant
ITLab

📅 June 2021 – Present   📍 Arlington TX

- Collaborated with research group to evolve and test a flask-based statistical visualization tool CoWiz
- Currently developing a full stack web server MLN-Dashboard using Next-React-GraphQL stack

Student Research Assistant
UTA Social Work

📅 June 2021 – Present   📍 Arlington TX

- Maintain and enhance multi-platform (iOS and Android) data collecting application MyAmble using flutter and firebase and web administrator interface

Crew Trainer
McDonald's

📅 May 2016 – Mar 2020   📍 Midlothian TX

- Led safety committee and addressed employees during 30-minute monthly safety meetings
- Trained employees on-the-job and formally
- In addition to 4 years of formal education, actively used Spanish on-the-job

PROJECTS

Computatrum

📅 Feb 2019 – Present

- Active project to develop teachable yet autonomous open-ended computer interaction agents
- Github: Limboid/computatrum, Limboid/computer-env, and Limboid/ainimal-zookeeper

---

Jnumpy

📅 Oct – Nov 2021

- Another autograd/deep learning/RL library
- Github: JacobFV/jnumpy

CERTIFICATIONS

Google TensorFlow Developer Certification
Google Developers

📅 April 2021

DeepLearning.AI TensorFlow Developer
Coursera

📅 Oct 2020

DeepLearning Specialization by DeepLearning.AI
Coursera

📅 Sept 2020

AWS Certified Developer – Associate
AWS

📅 Mar 2019

AWS Certified SysOps Administrator – Associate
AWS

📅 Mar 2019

AWS Certified Solutions Architect – Associate
AWS

📅 Feb 2019

20Q

📅 June – Aug 2021

- Android app developer in a 4-person group
- Github: JacobFV/20Questions

multigraph-nn

📅 May 2021

- Architected and developed library of dynamic time GNN abstractions on top of tensorflow and keras
- Github: JacobFV/multigraph-nn

DesparadosAEye

📅 Jan – May 2021

- Project manager, general app developer, and ML engineer for a 5-person group developing open-ended Android chatbot
- Github: kmosoti/DesparadosAEYE

Stanford Open Datathon Group Project

📅 April 2021

- Worked as data scientist in a 5-student international group analyzing sentiment and semantics of the COVID19 pandemic
- Personal contributions: https://jacobfv.github.io/projects/2021_SODP

Home Internet Factory

📅 April 2020

- Internet connected prototyping machine hub
- Raspberry Pi 4 served as gateway to tabletop CNC router, 3D printer, two cameras, and 3.3V logic I/O auxiliary interfaces
- Blog post: https://medium.com/@jacobfv123/industrialautomation-home-bba924a3b2f0

Workplace Surveillance System

📅 July 2019

- Employee phone detection computer vision system
- Client-side neural network programmed with tensorflow.js
- Demonstration to employer succeeded identifying employees on their phone, but employer not willing to pay to use
- Github: JacobFV/Workplace-Surveillance-System

Big Blender Farm

📅 July 2018 – April 2019

- Blender render farm web application; full stack
- Although never completed, became more familiar with Blender python scripting, general animation workflow, web application development, and the internet
- Planned extensively how to use Amazon Web Services (AWS) WAF, API-Endpoints, Lambda, static S3 buckets, CloudFront, and DynamoDB to deliver content and application on a completely serverless architecture

SQT-English-to-Spanish-Translator

📅 Oct – Nov 2016

- Flexible Spanish – English translation system
- Programmed in C# with Visual Studio
- Formalized many more aspects of English – Spanish translation
- Github: JacobFV/SQT-English-to-Spanish-Translator

Sale Translator

📅 Oct – Nov 2015

- Basic Spanish – English translation system
- Programmed in C# with Visual Studio
- Implements formal language parsing and production system
- Github: JacobFV/Sale

Cookie Cutter CNC

📅 Mar – May 2015

- 36"×36" sheet metal cutter with server and client control systems
- Full stack engineering project. Designed and developed C# .svg parser, toolpath scheduler, and optimizer, Arduino C controller with serial protocol and electronics, and CNC machine with electrodischarge machining head.
- Blog post: https://jacobfv123.medium.com/cookie-cutter-cnc-923c68932ee6