# Daniel Lopez

Full Stack / DevOps / Release Engineer



#### **EDUCATION**

## University of Nevada, Reno

Masters of Computer Science

Class of 2018



Reno, NV

Thesis: Evolving GPU Accelerated Capsule Networks Focuses included: Multi CPU/GPU programming, Graphics Engines, Neural Network Architecture, Capsule Network Optimization

#### Bachelors of Computer Science and Engineering Minor in Mathematics

2x T.A. in Graphics Engine Implementation Courses Class of 2017

Reno, NV

## **WORK EXPERIENCE**

## Simple Rose Inc

Senior Software Engineer

Optimization Start Up 03/2023 - Present



St. Louis, MO

SkyHive

- Helped develop novel Solver-as-a-Service (SOLaaS) cloud solution
- Standardized CICD for LP Solver and SOLaaS products

Contact: Mark Ostroot - mostroot@simplerose.com

## SkyHive Al

Senior DevOps Engineer

Workforce Intelligence and Reskilling Start Up 11/2022 - 02/2023

Toronto, Ontario, Canada

- Architected a alerting system to dynamically create and funnel all CloudWatch, MongoDB alerts to Slack
- Developed an extensible DevOps CLI specific to the ecosystem

Contact: Charles Marker - <a href="mailto:charles@skyhive.io">charles@skyhive.io</a>

## NoCap Shows

Software Engineer



- Standardized deployments and release engineering across full stack using Github Actions and GCP
- Fast paced iterative development on video streaming website and internal
- Stood up and maintained new APIs that scales and adapts to unstandardized data

Contact: Josh Smallman - is@nocapshows.com

#### Intuit

Software Engineer 2

Turbo Tax, Consumer Group 01/2020 - 07/2021



- Gained extensive experience in setting up Jenkins pipelines and developing Jenkins plugins
- Templatized Dockerfiles and other deployment files for ease of generation
- Led project aimed at enhancing developer Git hooks for automated task progress management

#### **SKILLS** Highly Competent Java + Spring Boot Node.js + React Python + Flask **Github Actions Jenkins** Dev Ops Docker **GCP AWS** Elasticsearch/Kibana **Orchestral Composition** Open GL **CUDA** MPI **Pianist Violinist** Blender 3D Modeling/Texturing **Voice Acting**

### **PUBLICATIONS**

## Avaler's Adventure (2017)

SIMPLEROSE Therapeutic Game for Speech Pathology Dept. at University of Nevada, Reno

Catherine R. Pollock, Daniel A. Lopez, et al. (2017) "Avaler's Adventure: An Open Source Game for Dysphagia Therapy", Proceedings of the ISCA 26th International Conference on Software Engineering and Data Engineering (SEDE 2017)

## Capsule Network Optimization (2018-2019)

Paper derived from Thesis work; building Capsule Networks in raw CUDA

Lopez, D. A., Wu, R., Barford, L., & Harris, F.C. (2019) A Memory Layout for Dynamically Routed Capsule Layers. In 16th Iternational Conference on Information Technology New Generations (ITNG 2019) (pp. 317-324)

## Today I Will Fly (2020)

Original Composition for a YouTube Original

Daniel Lopez, Orchestral Score. "Create Together #WithMe", YouTube Originals, HitRecord series, S1 E4, "Today I Will Fly" (Cold Open)

## LANGUAGES AND EXPERIENCES

ENGLISH		JS/TS	
		Java	
		C++	
		Golang	

#### Software Engineer 1

Turbo Tax, Consumer Group 08/2018 - 01/2020

San Diego, CA

- Worked on internal tools team for proprietary language support.
- Enhanced automation for generation of back-end microservices and UI
- Developing Dev Productivity Tools including customized Git hooks and artifact deployment.

Contact: Kathiravan Tamilvanan - kathiravan\_tamilvanan@intuit.com