Miguel Morales

TECHNICAL SKILLS

Languages Python*, Java*, C, C++, C#, R*

Frameworks Numpy*, Scikit-Learn*, Scipy*, OpenCV*

TensorFlow*, Keras, BURLAP*, Android SDK

Matplotlib, ggplop2, OpenAl Gym, Pandas

Fields Reinforcement Learning*, Deep Learning*

Artificial Intelligence*, Statistics Optimal Control, Parallel, Bayesian

Tools git*, Docker*, Emacs*, UNIX tools*

Vagrant, AWS, KVM*, VirtualBox

Methodologies Agile Scrum, OOP, OOD, OOA, TDD, BDD

OSs Linux* (Arch, RedHat, Debian), Windows, ESXi

*Denotes expert level

PROJECTS

Deep Reinforcement Learning | Ping Pong Agent

Udacity

www.github.com/mimoralea/king-pong

- Incorporated TensorFlow and OpenCV to learn the state space from raw pixels.
- Implemented Deep Reinforcement Learning algorithm as suggested by the Google DeepMind team.

Artificial Intelligence for Robotics | PID & Localization Georgia Tech www.github.com/mimoralea/kalman-karma

- Influenced team to propose unique project to the Instructors.
- Conjointly implemented PID controller and localization algorithms such as SLAM and Particle Filter.

Convolutional Neural Networks | Traffic Sign Classification Udacity www.github.com/mimoralea/traffic-signs

- Programmed image pre-processing pipeline using Computer Vision techniques and OpenCV library.
- Implemented and improved a Deep Convolutional Network from published paper using TensorFlow.

Behavioral Cloning & Transfer Learning | Driving Clone Udacity www.github.com/mimoralea/behavioral-cloning

- Leverage existing CNN architecture and weights using Transfer Learning to clone human driving in simulated car.
- Built parallel implementation on multiple GPUs with Keras.

FORMAL EDUCATION

Georgia Institute of Technology

MS in Computer Science – GPA 3.89/4.00 Interactive Intelligence Specialization

Florida Atlantic University

BS in Computer Science – GPA 3.88/4.00 Upsilon Pi Epsilon - Computer Science Honors Society

CERTIFICATES AND ADVANCED COURSES

Machine Learning Nanodegree Udacity
Self-Driving Car Nanodegree Udacity
Data Science Specialization Coursera
Reinforcement Learning and Decision Making GaTech
Artificial Intelligence for Robotics GaTech
Artificial Intelligence GaTech
Machine Learning GaTech

LinkedIn, GitHub, StackOverflow, Twitter by mimoralea

Website: www.mimoralea.com

WORK EXPERIENCE

Udacity Remote

Self-Driving Car Nanodegree Mentor

Dec 2016 - Current

 Motivated group of 20 students daily to learn and study Self-Driving Car concepts and techniques.

• Supervised weekly student progress and held them accountable allowing the effort of learning to occur.

Udacity Remote

Code Reviewer Jun 2016 - Current

- Provide actionable feedback to students around the world for Self-Driving Car and Machine Learning projects.
- Recommend program design best practices in Python, to improve code readability and maintainability.

Georgia Institute of Technology

Remote

Head Graduate Teaching Assistant

Jan 2016 - Current

- Host weekly open floor online meetings yielding improved student performances.
- Oversee team of graders and provide standards to deliver a seamless experience.

Hewlett Packard Enterprise

Plano, TX

Firmware Engineer

Jun 2015 – Apr 2016

- Initiated peer programming approach and mentored engineers on Java and program design principles.
- Enhanced the internal test development framework coverage and quality.

HomeCEUConnection

Plano, TX

Senior Web Developer

May 2014 - Apr 2015

- Established Agile methodologies, streamlining the completion of tasks.
- Diagnosed site-wide downtime, and took immediate action and complex decisions under pressure to resolve issue.

Cisco Systems

Lawrenceville, GA

Software Engineer

Mar 2013 - Jan 2014

- Co-authored prototypes of the IP Client set top boxes to be showcased at national customer events and news media.
- Collaborated on design meetings to architect solutions.

AT&T

Plano, TX Jan 2011 – Mar 2013

Member of Technical Staff

Aligned U-verse Advanced Technical Support Data Collection

- Team to better assist customers.
- Pioneered C# web dashboard that centralized the 13,000+ servers of the entire U-verse platform.

EXTENDED WORK EXPERIENCE

DataCore | Test and Integration ArchieMD | Test and Integration Freelancer | Web Developer VideoNET | System Administrator

Florida | 2010 - 2011 Florida | 2010

Florida | 2007 - 2009

Venezuela | 2003 - 2006