Miguel Morales

TECHNICAL SKILLS

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

Frameworks Numpy*, OpenAl Gym*, PyTorch, TensorFlow

Keras, Scikit-Learn, Scipv. OpenCV. Matplotlib

Fields Reinforcement Learning*, Deep Learning

Artificial Intelligence, Statistics

Tools git*, GitLab*, AFSIM*, Docker*

Emacs, UNIX tools*, DominoDataLabs

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

Linux* (Arch, RedHat, Debian), Windows, ESXi * Denotes advanced level

PROJECTS

Grokking Deep Reinforcement Learning book | Author

Manning

https://www.manning.com/books/

grokking-deep-reinforcement-learning

- Authored a book on deep reinforcement learning.
- Created all figures and wrote all text to explain challenging concepts in an approachable way.

Deep Reinforcement Learning SOTA algorithms | Engineer Manning www.github.com/mimoralea/gdrl

- Implemented reusable code for a wide variety of reinforcement learning algorithms.
- Use PyTorch for implementing deep reinforcement learning methods, such as DQN, DDPG, SAC, PPO, and more.

Deep Reinforcement Learning AC lectures | Teacher

Udacity

https://www.udacity.com/course/

deep-reinforcement-learning-nanodegree--nd893

- Developed the Actor-Critic lectures of the Deep Reinforcement Learning Nanodegree.
- Created all draft animations to explain the concepts in an intuitive way.

FORMAL EDUCATION

Georgia Institute of Technology

ETA 2025

PhD in Computer Science - GPA -/4.00

Machine Learning & Intelligent Systems Specialization

Georgia Institute of Technology

May 2017

MS in Computer Science - GPA 3.70/4.00

Interactive Intelligence Specialization

Florida Atlantic University

BS in Computer Science - GPA 3.88/4.00

Upsilon Pi Epsilon - Computer Science Honors Society

Broward College

Dec 2009

Dec 2010

AA in Computer Science - GPA 3.66/4.00

CERTIFICATES AND ADVANCED COURSES

Udacity Deep Learning Foundations Nanodegree	Jan 2018
Udacity Self-Driving Car Nanodegree	Oct 2017
Udacity Machine Learning Nanodegree	Jun 2016
GaTech Artificial Intelligence	May 2016
GaTech Machine Learning	May 2016
GaTech Reinforcement Learning and Decision Making	Dec 2015
GaTech Artificial Intelligence for Robotics	Dec 2014

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LinkedIn, GitHub, StackOverflow, Twitter by mimoralea

Website: http://mimoralea.github.io/

WORK EXPERIENCE

Lockheed Martin Littleton, CO & Full-Time Remote Research Engineer Staff Oct 2020 - Current Software Engineer Staff

Sep 2019 - Oct 2020 Software Engineer Senior Jun 2017 - Sep 2019

- Developed a framework for training deep reinforcement learning agents on military scenarios.
- Trained deep reinforcement learning agents on a variety of military scenarios and domains.
- Architect a prototype of a follow-me perception system for military applications.
- Research and experiment with deep neural network architectures for sensor fusion and explainable Al.
- Support Affordability IRAD projects by evaluating capabilities of cost-effective sensors.
- Develop the perception pipeline of large autonomous trucks.

Georgia Institute of Technology

Remote

Instructional Associate Head Graduate Teaching Assistant

May 2017 - Current Jan 2016 - May 2017

- Teach the Reinforcement Learning and Decision Making graduate course since Spring 2016.
- Teach the Machine Learning undergraduate course in the Summer 2020.
- Oversee team of 10-20 Graduate Teaching Assistants.
- Host weekly open floor Q&A sessions with 300-400 students.

Udacity Remote

Content Developer Jun 2018 - Dec 2018 Project Reviewer Jun 2016 - Jun 2017 Student Mentor Dec 2016 - Jun 2017

- Developed the Actor-Critic lectures for the Deep Reinforcement Learning Nanodegree.
- · Provided actionable feedback to students around the world on self-driving car and machine learning projects.
- Recommended program design best practices in Python to improve code readability and maintainability.

Hewlett Packard Enterprise

Plano, TX

Firmware Engineer

Jun 2015 - Apr 2016

Venezuela | 2003 - 2006

- Initiated peer programming approach and mentored engineers on Java and program design principles.
- Supported the release of next generation server blade management software.
- Improve quality of production software by partnering with development groups of different business areas.

EXTENDED WORK EXPERIENCE

VideoNET | System Administrator

HomeCEUConnection Senior Web Developer	Texas 2014 - 2015
Cisco Systems Software Engineer	Georgia 2013 - 2014
AT&T Member of Technical Staff	Texas 2011 - 2013
DataCore Test and Integration	Florida 2010 - 2011
ArchieMD Test and Integration	Florida 2010
Freelancer Web Developer	Florida 2007 - 2009