Miguel Morales

TECHNICAL SKILLS

Fields	Reinforcement Learning, Artificial Intelligence, Deep Learning, Deep Reinforcement Learning
Subfields	Value-based methods, Actor-Critic methods, Curriculum Learning, Multi-agent systems
Methodologies	Agile, Scrum, OOP, OOD, OOA, TDD, BDD
Languages	Python, Java, C++, C, C#, R
Frameworks	OpenAI Gym, Numpy, PyTorch, Scipy
Tools	AFSIM, git, Docker, Emacs, UNIX tools
OSs	Linux (Arch, RedHat, Debian), Windows, ESXi

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 — Dec 2010
BS in Computer Science – GPA 3.88/4.00
Upsilon Pi Epsilon - Computer Science Honors Society

Broward College — Dec 2009
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

EXTERNAL PROJECTS

Grokking Deep Reinforcement Learning book | Author — Manning
`https://www.manning.com/books/`
`grokking-deep-reinforcement-learning`
- Authored a book on deep reinforcement learning.
- Wrote all text, and created all figures to ensure challenging concepts were introduced in an approachable way.

Deep Reinforcement Learning SOTA algorithms | Engineer — Manning
`www.github.com/mimoralea/gdrl`
- Implemented from scratch reusable code for a wide variety of reinforcement learning algorithms, and data analysis tasks.
- Used PyTorch for implementing deep reinforcement learning methods, such as DQN, PER, A3C, DDPG, SAC, PPO, GAE, 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 and full scripts to explain the concepts in an intuitive way.

✉ mimoralea@gmail.com; +1 678 646 2583
LinkedIn, GitHub, StackOverflow, Twitter by **mimoralea**
Website: `http://mimoralea.github.io/`

WORK EXPERIENCE

Lockheed Martin — Littleton, CO & Full-Time Remote
Machine Learning Engineer Sr Staff — Nov 2021 – Current
Research Engineer Staff — Oct 2020 – Nov 2021
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.
- Architected a prototype of a follow-me perception system for military applications.
- Implemented explainable AI agents, including deep reinforcement learning agents.
- Supported affordability IRAD projects by evaluating capabilities of cost-effective sensors.
- Developed perception pipeline of autonomous mining trucks.

Georgia Institute of Technology — Remote
Instructional Associate — May 2017 – Current
Head Graduate Teaching Assistant — May 2016 – May 2017
Graduate Teaching Assistant — Jan 2016 – May 2016
- Taught a Reinforcement Learning and Decision Making graduate course since Spring 2016.
- Taught a Machine Learning undergraduate course in Summer 2020.
- Oversaw up to 20 Graduate Teaching Assistants per semester.

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

EXTENDED WORK EXPERIENCE

HomeCEUConnection | Senior Software Engineer	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
VideoNET | System Administrator	Venezuela | 2003 – 2006