

TECHNICAL SKILLS

Languages	Python*, Java*, C++*, C, C#, R
Frameworks	Numpy*, Scikit-Learn*, Scipy*, OpenCV* TensorFlow*, Keras, Boost, Android SDK Matplotlib, ggplot2, OpenAI 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.
- Jointly 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 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

CERTIFICATES AND ADVANCED COURSES

Udacity Robotics Nanodegree	Jun 2018*
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

* Future date

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📄	LinkedIn, GitHub, StackOverflow, Twitter by mimoralea
🌐	Website: www.mimoralea.com

WORK EXPERIENCE

Lockheed Martin Littleton, CO
 Software Engineer Senior Jun 2017 – Current

- 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 AI.
- 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 May 2017 – Current
 Head Graduate Teaching Assistant Jan 2016 – May 2017

- Host weekly open floor Q&A sessions with 100-300 students yielding improved student performances.
- Oversee team of 5-10 graders per semester and provide standards to deliver a seamless experience.
- Answer daily student questions related to reinforcement learning and decision making problems.
- Create new content each semester enhancing the student experience and engaging them in learning.

Udacity Remote
 Code Reviewer Jun 2016 – Jun 2017
 Self-Driving Car Nanodegree Mentor Dec 2016 – Jun 2017

- Motivated a 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.
- Provide actionable feedback to students around the world on self-driving car and machine learning projects.
- Recommend 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.
- Enhanced the internal test development framework coverage and quality.
- 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

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
VideoNET System Administrator	Venezuela 2003 – 2006