

TECHNICAL SKILLS

Languages	Python*, Java, C++, C, C#, R
Frameworks	Numpy*, OpenAI Gym*, PyTorch, TensorFlow Keras, Scikit-Learn, Scipy, 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
OSs	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.
- 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, A3C, 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 and full scripts 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 **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**

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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.
- 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 **Jan 2016 – May 2017**

- Taught the Reinforcement Learning and Decision Making graduate course since Spring 2016.
- Taught the Machine Learning course in Summer 2020.
- Oversaw up to 20 Graduate Teaching Assistants per semester.
- Hosted weekly open floor Q&A sessions with thousands of students over the years.

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 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**