Auguste Lehuger

+33 (0)6 04 51 87 10 • auguste.lehuger@polytechnique.edu • alehuger.github.io

Education

Imperial College London   *2019 – 2020*
MSc in Computing : Artificial Intelligence and Machine Learning
Reinforcement Learning, Deep Learning, Computer Vision, Mathematics for ML, Natural Language Processing

École polytechnique   *2016 – 2019*
One of France's top ranking schools for science and engineering.
MSc in Applied Mathematics and Computer Science
Statistics, Probability, Complex Analysis, Differential Calculus, Random Models, Advanced algorithmic

Paris Sciences & Lettres (PSL)   *2013 – 2016*
Best ranked University in France according to Times Higher Education 2020.
Bachelor of Sciences awarded with highest honours, majoring in Mathematics — ranked 2th / 163

Academic Projects

Deep Reinforcement Learning in Maze Environment ([github](#))   *Fall 2019*
• Designed a learning agent based on a deep Q learning framework.
• Implemented extensions: *target network*, *prioritised replay* and custom network visualisations.

Neural based agent in complete information board games ([article](#))   *Spring 2019*
• Designing a learning environment modelling any zero sum game with complete information.
• Agent learning based on Convolutional Neural Network trained with Monte Carlo Tree Search.

Work Experience

EOS Imaging   *Apr – Sep 2019*
Machine learning research intern, *Montreal*

• Researched algorithms to automatically generate 3D meshes from biplanar radio of vertebrae.
• Developed a CNN and a Statistical Shape Model to adjust vertebrae on size, shape and orientation.

Ippon Technologies USA   *Jun – Sep 2018*
Web development Intern, *Richmond (Virginia)*

• Developed a microservice architecture website with *Angular* & *Spring* technologies.
• Hosted on cloud and interconnected with an Alexa App with *Jenkins* and *Amazon Web Service.*

Skills

• **Programming**: Python (TensorFlow, PyTorch, Pandas), Java, JavaScript, HTML, CSS
• **Languages**: French (native), English (fluent), Spanish (limited working proficiency)

Outside activities

Associative :

• Math trainer at **PNC** *(Cambodian NGO):* designed & taught the math curriculum in Phnom Penh – *6 months*
• Founder of *X Botanical Garden*: led a 300 m² pavilion construction for Vertical Farming – *30k €, 150 pax*

Board & Card Games:

• Diligent Player of The Resistance: hardened resistant, I am still working on my spy persona.
• Poker Player: competed in nationwide tournaments.