Nicolas Ward nicolasward.github.io ward.nicolas@outlook.com @neuralnico

I come alive at the intersection of education, product design and machine learning.

Education.

MSc, Machine Learning
University College London, UK
2019 - 2020

- Taught by researchers from DeepMind, Facebook AI and UCL Computer Science
- Dissertation on adversarial bias mitigation in web search

BSc, Applied Mathematics
University of Nice, France
2016 - 2019

- Highest scoring student in the Faculty of Science
- Innovation award for outstanding contribution to Science and Technology
- Dissertation on statistical coincidence detection of neural spike train patterns

Experience.

Knap / Research Intern, Machine Learning
Monaco / June - August 2018

Designed prediction models for real-time fraud detection (Bayesian Inference, Markov decision processes, Monte Carlo methods).

Demola / Lead Designer
Salt Lake City, USA & Nice, France / January - June 2018

Led a team of six in building an interactive learning system for museum visitors around the world. We earned a scholarship to attend an entrepreneurship programme in Lassonde Studios, a hub for young innovators at the University of Utah.

Amadeus IT Group / Intern, Data Science
Sophia Antipolis, France / July - August 2015

Worked in the Travel Intelligence team. Built a framework to monitor the integrity of the 10,000+ data files received daily by the company. Familiarised with Elasticsearch, Logstash, Kibana and Apache Kafka.

Relevant courses.

Game Theory I & II,
Differential Calculus,
Supervised Learning,
Deep Learning,
Graphical Models,
Machine Vision,
Reinforcement Learning,
Natural Language Processing,
Affective Computing,
Bioinformatics

Languages.

French / native
English / bilingual
Portuguese / read and write
Spanish / read and write

Relevant technical skills.

Python // ODE solving / Bayesian Inference on graphs (JTA, HMMs) / Kernel Methods / Image tracking, Condensation, Homographies / Supervised Learning algorithms (k-NN, Naive Bayes, Least Squares, Trees)

Pytorch // Extensive use in Deep Learning (CNNs, RNNs)

MatLab // Simulation of various stochastic processes (random walk, Brownian motion, Poisson process, reproduction models, birth-and-death)

R // Statistical computing (Monte Carlo Methods, PCA, maximum likelihood estimations, clustering algorithms)

C++ // Implementation of a realistic 8 ball pool game / Modelling of Brownian motion of gas in a box

Java // Design of a modern version of Snake

Julia // Implementation and training of various Deep Learning models (CNNs, RNNs, VAEs, MLPs)