Alexandre Heuillet

Third year software engineer student at Enseirb-Matmeca looking for a PhD student position (CIFRE) in Machine Learning.

22 yo

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Languages

French: Mother tongue

English: Professionnal level (TOEIC 990 / IELTS 7.5)

Japonais: Beginner level

Skills

Languages: Python, C, C++, C#, Shell Script, Java, Javascript, HTML, CSS, PHP

Machine Learning: PyTorch, Keras, TensorFlow, RNNs, GANs, CNNs, Reinforcement Learning, Reservoir Computing

Multimedia: Unity

Web Frameworks: Symfony 4, Wordpress, Bootstrap 4, VueJS, Django

Databases: MySQL, SQLite, MongoDB

Education

Since 2017 — ENSEIRB-MATMECA — Bordeaux, France
Software engineer student in computer science curriculum (Master), specialized in Artificial Intelligence. Graduation expected in 2020.

2015 - 2017 — CPBx — Bordeaux, France
French intense math and physics preparation curriculum before entering a High Engineering School.

2012 - 2015 — Lycée des Graves — Bordeaux, France
High School diploma (bacchalaureate) obtained with high honors.

Experience

02/2020 - 07/2020 — Groupe Renault — Paris, France
Research intern in the ADAS department. Creation of a GAN-based Python application that generates photorealistic street videos from segmented images in order to test onboard cameras.

06/2019 - 08/2019 — Kyushu University — Fukuoka, Japon
Research intern in an AI and Robotics laboratory. Implementation of a Microsoft Hololens app dedicated to help training nursing staff to provide care to elderly people.

04/2018 - 04/2019 — Aquitaine Électronique Informatique — Bordeaux, France
Director of the information systems for ENSEIRB-MATMECA's Junior-Enterprise. Maintenance and improvement of software and websites, technical assistance and computer consulting, team management.

06/2018 - 07/2018 — Omnitech Security — Mérignac, France
Intern. Unitary and integration tests conduction, redaction of PHP scripts to remote control domotic equipment.

Academic projects

10/2019 - 01/2020 — Redaction of a state-of-the-art survey on Explainable Reinforcement Learning (XRL) and implementation of a novel interpretability method based on Shapley values compuatation. This work was supervised by a researcher from INRIA Flowers team.

10/2018 - 03/2019 — Creation of a web platform (made with *Django*) analyzing RNNs for researchers of INRIA.

03/2019 - 05/2019 — Creation of a Python-based artifical intelligence capable to play *Othello* at expert level.

01/2018 - 05/2018 — Conception of a graphical simulator in C language for Small Size League Robocup matches.

Publications

03/2020 (expected) — Alexandre Heuillet, Fabien Couthouis and Natalia Diaz Rodriguez. "Explainability in Reinforcement Learning". (Work in progress)

Interests

Science and technologies (Web, Machine Learning and Robotics especially), computer hardware, History, cycling (regular practice), role playing games and card games.