



University
of Glasgow

Valentin Charvet
Third-Year PhD Student



Sir Alwyn Williams Building
University of Glasgow - G12 8RZ
v.charvet.1@research.gla.ac.uk
<https://github.com/vcharvet>
@ValentinCharV

EDUCATION

2019-
Current

University of Glasgow - School of Computing Science

Started a PhD within the *Inference, Dynamics and Interaction* group, under supervision of Roderick Murray-Smith and Sebastian Stein (and formerly Bjørn Sand Jensen)

Research Interests:

- Robustness in Model-Based Reinforcement Learning [2]
- Probabilistic Models and Approximate Inference [4]
- Closed-Loop control systems

2015-2019

Télécom Paris - Université Paris-Saclay

One of the top French Engineering schools

MSc

Majored in DataScience and Machine Learning

2013-2015

Lycée aux Lazaristes

Two-year intensive foundation course for competitive entrance in French engineering schools.

Majored in Mathematics and Physics

EXPERIENCE

Spring 2018

Intitut Gustave Roussy

Machine Learning Research, 6 months internship

Institut Gustave Roussy is one of the world leading cancer research institutes for patient care, research and teaching

Initiated a research project in the Therapeutic Innovation and Early Drug Development Department (DITEP) to design a decision support tool for doctors in the context of oncology early clinical trials [1, 3]

Fall 2017

Claravista

Machine Learning Engineer, 6 months internship

Claravista is a Paris-based high performance marketing firm

Implemented a LifeTime Value algorithm based on Random Forests and Markov Chains, integrated the API to Claravista back-end data analytics platform

Summer
2016

OLPC (NGO), volunteership

Teaching basic computer science in a remote village in Madagascar, technical maintenance of educational laptops and installation of a local intranet

2016 - 2017

Student Bar, Manager

Responsible of a team of 15 people and 100k€ annual budget as well community management

PUBLICATIONS

- [1] Guillaume Beinse et al. “Prediction of Drug Approval After Phase I Clinical Trials in Oncology: RESOLVED2”. In: *JCO Clinical Cancer Informatics* 3 (2019). PMID: 31539266, pp. 1–10. DOI: 10.1200/CCI.19.00023.
- [2] Valentin Charvet, Bjørn Sand Jensen, and Roderick Murray-Smith. “Learning Robust Controllers Via Probabilistic Model-Based Policy Search”. In: *Robust ML Workshop - ICLR 2021* abs/2110.13576 (2021).
- [3] Valentin Charvet et al. “Natural Language Processing for Patient Selection in Phase I or II Oncology Clinical Trials”. In: *JCO Clinical Cancer Informatics* 5 (2021). PMID: 34197179, pp. 709–718. DOI: 10.1200/CCI.21.00003.
- [4] Anders Kirk Uhrenholt, Valentin Charvet, and Bjørn Sand Jensen. “Probabilistic selection of inducing points in sparse Gaussian processes”. In: *Proceedings of the Thirty-Seventh Conference on Uncertainty in Artificial Intelligence*. Ed. by Cassio de Campos and Marloes H. Maathuis. Vol. 161. Proceedings of Machine Learning Research. PMLR, 2021, pp. 1035–1044.

PROJECTS

Masters Project - Distributed Density-Based Clustering

Implementation of a density-based clustering algorithm with Apache Spark. The method implemented is very similar to OPTICS algorithm, with adaptations for the distributed nature of the Spark engine

Masters Project - Scientific Paper Implementation

Implementation of the paper *Deep Reinforcement Learning from Human Preferences* (Christiano et al, 2017)

Machine Learning Challenges

Took part in three internal challenges: Acoustic Scene Classification, Face Recognition and Object Geolocation (code and report available at <https://github.com/vcharvet/geoloc-challenge>) using machine learning and numerical optimization

LANGUAGES

French (native)

English (professional)

Spanish (basic)

HOBBIES

- Former member of several student societies: video, student union...
- Music (listening and playing)
- Collective sports, alpine skiing