

# Hugo Cisneros

## PERSONAL DATA

Website: <https://hugocisneros.com>

LinkedIn: <https://www.linkedin.com/in/hugo-cisneros-04347212b/>

GitHub: <https://github.com/hugcis/>

## WORK EXPERIENCE

Apr - Sep 2019

**CIIRC (Czech Institute of Informatics, Robotics and Cybernetics) Research Intern**, Prague

Under the supervision of Tomas Mikolov (Facebook AI). Studied emergence, complexity and spontaneous organization in complex systems and their applications to Artificial intelligence.

Mar - Sep 2018

**INRIA and CNRS (LIMSI) Research Intern**, Paris

Under the supervision of Xavier Tannier and Ioana Manolescu. Built a software for extracting and integrating multiple data sources with **NLP and data processing algorithms** for data journalism. Worked with journalists from *Le Monde (Les Décodeurs)* on automating their data processing pipelines and using NLP for their investigations. Reviewed literature on **machine learning in graphs**, **automatic knowledge base construction** and **natural language processing for fact checking**.

Jun - Sep 2017

(Part-time) Oct  
2017 - Mar 2018

**Aiden.ai (start-up) Software engineering and Machine Learning Research Intern**, London

Worked on building an AI powered virtual colleague for Marketing analysts based on Natural Language Processing. Participated in implementing the chat interface and the Natural Language recognition system with **JavaScript**. Implemented Machine learning algorithms with **Python** for predicting marketing data, classifying and clustering users.

Sep 2016 - Feb  
2017

**ENS Ulm, Kastler-Brossel Laboratory Research assistant**, Paris

**Light control and propagation in amplified multimode fibers**

Implemented and optimized finite elements simulations with **Python** and **Matlab**. Performed high performance computing on scientific calculation clusters. Worked with a PhD candidate on building a tool for optimizing the propagation of a light beam in optical fibers.

## EDUCATION

Current

PhD Student **INRIA, CIIRC CTU<sup>1</sup>**, Paris & Prague

Nov 2019

**Unsupervised learning with Complex Systems and Evolution**

Sep 2019

MVA Master in Machine Learning and Applied Mathematics, **ENS Paris Saclay**, Paris

Sep 2018

Relevant Coursework: Convex Optimization, Probabilistic Graphical Models, Computer Vision, Reinforcement Learning, Deep Learning, Speech and Natural language processing, Kernel Methods, Biostatistics, Theoretical Foundations of Deep Learning

Sep 2018

Master of Science in Engineering, **Mines ParisTech**, Paris

Sep 2015

Specialization: Computer Science - (3.7 GPA)

Relevant Coursework: Machine Learning, Probabilities, Statistics, Programming

Aug 2015

Preparatory class for *Grandes Ecoles* **Lycée Stanislas** (Paris) MPSI and MP\*

Sep 2013

Bachelor's Degree in Mathematics and Physics, national competitive exam for entering engineering school.

Aug 2013

Scientific Baccalauréat (High school diploma in Maths, Physics and Life Sciences) - High distinction

## PUBLICATIONS

Cisneros, H., Sivic, J. & Mikolov, T. **Evolving Structures in Complex Systems**. in 2019 IEEE Symposium Series on Computational Intelligence (SSCI) 230–237 (IEEE, 2019).

Cisneros, H., Sivic, J. & Mikolov, T. **Visualizing computation in large-scale cellular automata**. Artificial Life Conference Proceedings 32, 239–247 (2020).

## PROJECTS

Jun-Aug  
2018

Participated in the n2c2 shared task of Harvard Medical School *Cohort Selection for Clinical Trials* in a joint team from AP-HP and LIMSI. Implemented **weakly-supervised and transfer learning methods for Medical NLP** (Keras). Finished 2nd among 30 teams.

Jan 2018

Built a Machine Learning based tool for discovering and matching similar arXiv papers based on similarity measures including **word embeddings-based similarities** of their abstract and **co-authorship graph distance**.

Feb 2017

Implemented a multi-currency blockchain in Python with a team of 9 people (Cryptography, network programming, team software development)

## LANGUAGES

ENGLISH: Fluent

FRENCH: Mother tongue

SPANISH: Intermediate

JAPANESE: School level

## COMPUTER SKILLS

Advanced: Python (Tensorflow, Pytorch, Django), C, Matlab, Java, Javascript (Node.js, Typescript and Web),  $\text{\LaTeX}$

Basic: Scala, Ruby, C++

## INTERESTS AND ACTIVITIES

---

- Mathematics, Statistics and Probabilities
- Technology, Open-Source, Programming
- Running (weekly practise), Fencing, Piano, Guitar