Cedric Perret
Postdoctoral Research Associate

Email: cedric.perret.research@gmail.com   **Twitter:** @Cedric_Perret13
Website: https://cedricperret.github.io/   **Research gate:** Cedric_Perret
Phone: +44 784 198 2047

Education and training

2018 **Santa Fe Complex Systems Summer School**, *Santa Fe Institute, USA*
Information theory, Non-linear dynamics, Network theory, Machine learning, Human evolution

2016 *MSc in Evolutionary Biology and Ecology*, *University of Montpellier*, *France*
Advanced evolutionary biology, Modeling in evolutionary biology, Advanced Biostatistics, Ecology, Population genetics, Evolutionary genomics, Quantitative genetics

2013 **MSc (1st year) in Ecology and Environment,** *State University of New Paltz, USA*
Biostatistics, Seminar in evolutionary studies, Biogeography

2012 **BA in Biology and Ecology**, *University of Franche-comte, Besancon, France*
Ecology, Formal and Population genetics, Biostatistics, Animals and plants Biology

Research Experience

2020 - present **Post-doctoral research associate,**
Teeside University, UK
Research projects in evolutionary game theory with The Anh Han

2016-2019 **Ph.D. "The evolutionary iron law of oligarchy"**, *Edinburgh Napier University, UK*
Under the supervision of Simon T. Powers and Emma Hart
Under the examination of Andy Gardner and Thomas Currie
Viva passed with minor corrections the 19/12/2019

2016 **Predation shapes the impact of cancer on population dynamics and the evolution of cancer resistance**
Institute of Research for Development, University of Montpellier, France
Internship under the supervision of Frederic Thomas and Benjamin Roche

2015 **Development of a computer tool for experimentations in cultural evolution**
Institute of Evolutionary Sciences of Montpellier, University of Montpellier, France
Internship under the supervision of Jean-Baptiste André and Nicolas Claidière

2015 **Co-evolution of the signalization of quality and mate choice in Human**
Institute of Evolutionary Sciences of Montpellier, University of Montpellier, France
Internship under the supervision of Bernard Godelle

2013 **Field study of genes implied in immunity responses of hosts infected by parasite *Borrelia sp***
Institute of Evolutionary Biology and Environmental Studies, Zurich, Switzerland
Internship under the supervision of Melissa Lemoine

Core skills

*Programming language skills***:**
- Proficient in Java, R, Mathematica
- Efficient in Python, Bash, Markdown

Computers skills:
- Proficient in LaTeX, Mendeley, Github, Microsoft office programs
- Efficient in web design (Wordpress, github.io)

Language skills:
- **French**: C2 (native language)
- **English:** C1 (TOEFL 2016 : 583/677)
- **Spanish:** B1

European driving license

Peer-reviewed publications:

First author:

2019 **Being a leader or being the leader: The evolution of institutionalised hierarchy.**
C.Perret, E.Hart and S.T. Powers
ALIFE 2019: The 2019 Conference on Artificial Life. MA: MIT Press
https://www.mitpressjournals.org/doi/pdf/10.1162/isal_a_00158

2018 **Can justice be fair when it is blind? How social network structures promote or prevent the evolution of despotism.**
C. Perret, S.T. Powers, J. Pitt and E. Hart
ALIFE 2018: The 2018 Conference on Artificial Life. MA: MIT Press
https://www.mitpressjournals.org/doi/abs/10.1162/isal_a_00058

2017 **Emergence of hierarchy from the evolution of individual influence in an agent-based model**
C. Perret, S.T. Powers and E. Hart
Proceedings of the European Conference on Artificial Life 2017. Cambridge, MA: MIT Press
http://cognet.mit.edu/proceed/10.7551/ecal_a_058

Submitted **Disorganized equality or efficient despotism: How group size drives the evolution of hierarchy in human societies**
C.Perret, S.T. Powers and E.Hart.

Under revision **Reciprocal interactions between cancer and ecological dynamics in a prey-predator system**
C.Perret, B. Roche, C. Gidoin, B. Ujvari and F. Thomas.

Co-author:

2018 **Trusting Intelligent Machines: Deepening trust within socio-technical systems**
P. Andras, L. Esterle, M. Guckert, T.A. Han, P.R. Lewis, K.Milanovic, T.Payne, C. Perret, J. Pitt, S.T. Powers, N. Urquhart and S. Wells
IEEE Technology and Society Magazine - https://ieeexplore.ieee.org/document/8558724

In preparation **Talking loud or talking often: How the interplay between network structure and agent influence affects the time to reach consensus in collective decision-making**
Z. Neu, C. Perret, A. Santoro, G. St-Onge.

Other outputs:

2019 **A theoretical investigation of transgenerational effects of population-scale disaster on prevalence of schizophrenia.**
C. Gunaratne, S. Jankowski, C. Perret, J. Tuominen, M. Wadl
Santa Fe project report

2019 **Using an opinion formation model to investigate the effect of leaders on collective decision-making**
C.Perret, S.T. Powers, E.Hart
Extended abstract - Workshop on Agent-Based Modelling in Human Behaviour (ABMHuB 2019)

Research dissemination:

International conferences:

Oral presentation at:
- ALIFE 2019: The Conference on Artificial Life, *Newcastle, UK* - https://2019.alife.org
- Evolution 2018: Joint Congress on Evolutionary Biology, *Montpellier, France* – https://www.evolutionmontpellier2018.org
- ECAL 2017: European Conference on Artificial Life, *Lyon, France* - https://project.inria.fr/ecal2017/

Poster presentation at:
- Evolution 2018: Joint Congress on Evolutionary Biology, *Montpellier, France* – https://www.evolutionmontpellier2018.org

Participation to:
- ESEB 2017: Congress of the European Society for Evolutionary Biology, *Groningen, Netherlands* – https://eseb.org/congresses/

- PPSN 2016: 14th International Conference on Parallel Problem Solving from Nature, *Edinburgh, UK* - http://www.ppsn2016.org/conference/

Local conferences:
Oral presentation at:
- 2019 Scottish Informatics and Computer Science Alliance (SICSA) pre evolutionary computing day, *Stirling, UK*
- 2019 School of Computing Research Conference, *Edinburgh Napier, UK*
- 2018 School of Computing Research Conference, *Edinburgh Napier, UK*
- 2016 MEE: Models in Ecology and Evolution Seminar, *Montpellier, France*

Poster presentation at:
- 2017 Scottish Informatics and Computer Science Alliance (SICSA) PhD Conference, *Dundee, UK*
- 2017 Edinburgh Napier University Research Conference, *Edinburgh Napier, UK*

Participation to:
- 2019 Scottish Informatics and Computer Science Alliance (SICSA) PhD Conference, *Stirling, UK*

Workshops:
- 2019 Workshop on Agent-Based Modelling in Human Behaviour, *ALIFE 2019, Newcastle, UK* - http://abmhub.braintree.com/
- 2019 Workshop on Evolution of Human Behaviour: Using theory to address societal challenges, *ALIFE 2019, Newcastle, UK* - https://ehbalife.github.io/
- 2019 Workshop on Trust in Intelligent Machines, *University of Gießen, Germany*
- 2019 Workshop on the Evolution and Dynamics of Institutions (EDI), *Edinburgh Napier University, UK*
- 2018 Workshop on Trust in Intelligent machines (TIM), *Edinburgh Napier University, UK* - *https://tim2018.wordpress.com/*

Seminar presentations:
2019 **School of biology seminar**, Department of Ecology and Evolution, *University of Lausanne* (Swiss)
2018 **Pr.Lehmann's team seminar**, Department of Ecology and Evolution, *University of Lausanne (Swiss)*
2018 **Pr.Gardner's team seminar**, School of Biology, *University of St Andrews (UK)*
2018 **Dr.Gross's team seminar**, Collective dynamics group, *University of Bristol (UK)*
2016, 2018 **School of Computing seminars**, School of Computing, *Edinburgh Napier University (UK)*

Academic event organisation:

Organisation of international workshops and conferences:
Lead organiser of:
- The 2019 Workshop Evolution of Human Behaviour: Using Theory to Address Societal Challenges, *ALIFE 2019 conference, Newcastle*. https://ehbalife.github.io/
- The 2019 Workshop on the Evolution and Dynamics of Institutions, *Edinburgh Napier University*.

Co-organiser of:
- The 2018 Workshop on Trust in Intelligent Machines, *Edinburgh Napier University*. *https://tim2018.wordpress.com/*

Member of local organiser committee of:
- PPSN 2016: 14th International Conference on Parallel Problem Solving from Nature, *Edinburg, UK*.

Organisation of seminar series:
Co-organiser of:
2017-2018 • School of Computing Seminar Series, *Edinburgh Napier University*
- o Organisation, scheduling and seminars facilitation
2017 • PhD Masterclasses, *Edinburgh Napier University*
- o Organisation of a one-day workshop with invited speakers

        ○ Organisation of a seminar series to offer PhD students the opportunity to share their skills

Grants

Lead applicant to:

2019   • PhD impact improvement Funds
- **Three months stipend** funded by Edinburgh Napier University

2018   • Researcher Development Funds for «Workshop on the Evolution and Dynamics of institutions »
- **£1500** funded by the Research Innovation Office, *Edinburgh Napier University*

2018   • Funds for Participation to Santa Fe Complex System Summer School
- **£1000** funded by Small Project & Mobility Grants, *Edinburgh Napier University*
- **£500** funded by SISCA summer school bursary, *Scottish Informatics & Computer Science Alliance*

2018   • Public engagement funds for « SciVid: Animated videos to support wider scientific communication »
- **£2500** funded by *Edinburgh Napier University*

Co-applicant to:

2017   • Researcher Development Funds for « School of Computing Masterclasses »
- **£800** funded by the Research Innovation Office, *Edinburgh Napier University*

2017   • Researcher Development Funds for « Workshop on Trust in Intelligent Machines»
- **£1500** funded by Research Innovation Office, *Edinburgh Napier University*

2016   • PhD studentship
- **Payment of full-time tuition fees and stipend for 3 academic years**, *Edinburgh Napier University*

Honours and Awards:

2019   **Best presentation Awards (3nd year PhD)** at the 2019 Edinburgh Napier School Conference
2018   **Best presentation Awards (2nd year PhD)** at the 2018 Edinburgh Napier School Conference
2017   **Best poster Awards** at the 2017 Edinburgh Napier University Conference

Professional activities:

Public engagement:

2018   SciVid Project: Animated videos to support wider scientific communication, *Edinburgh Napier University*
- Lead organiser of the project
- Organisation of a one-day workshop on science scriptwriting
- Two months supervision of intern for the creation of an animated video on one of my published research

2017, 2018   Explorathon, *Edinburgh*
- Presentation of the field of artificial evolution during two open public events

2017   Cyber academy workshop, *Edinburgh Napier University*
- Introduction of Colinton Primary school to robotics and programming

Teaching:

2017, 2018   Two classes in the module "Multi-Agent Systems", *Edinburgh Napier University*
2018   Two months student supervision for the SciVid Project, *Edinburgh Napier University*

Peer-reviews:

2018-2019   Peer-review manuscripts for journals:
- 2 manuscripts for Scientific Reports
- 1 manuscript for Journal of Mathematical Psychology

Others:

2019   Editor assistant for the Evolutionary Computation Journal, *Edinburgh Napier University*

- Pre-processing of submissions to the journal
- Reports writing

2019   Member of the funding panel for the Research Development Fund, *Edinburgh Napier University*
- Reviewing of application to the fund

Referees

Simon Powers, Lecturer
PhD supervisor,
Edinburgh Napier University, Edinburgh
email: S.Powers@napier.ac.uk

Emma Hart, Professor
PhD second supervisor,
Edinburgh Napier University, Edinburgh
email: E.Hart@napier.ac.uk

Jeremy Pitt, Professor
Collaborator,
Imperial College of London, London
email: j.pitt@imperial.ac.uk

Benjamin Roche, Researcher Director
Master supervisor,
Research Institute for Development, Mexico City
email: benjamin.roche@ird.fr