



Rodrigue Govan

PHD STUDENT IN COMPUTER SCIENCE

PROFESSIONAL BACKGROUND

FIXED-TERM CONTRACT – DATA SCIENTIST

Institute of Exact and Applied Sciences, University of New Caledonia

2020 – September to December

- Analysis of natural water quality data in New Caledonia.
- Contribution to research paper writing.
- Environment : Python (sklearn, statsmodels, plotly, Jupyter), QGIS, Access, PostgreSQL.

INTERNSHIP – DATA SCIENTIST

IDAIA Group, Bordeaux, France

2019 – February to August

- Use of Deep Learning for object detection on satellite images.
- Environment : Python (sklearn, Tensorflow, PyTorch, plotly, Jupyter), QGIS, Linux.

ACADEMIC BACKGROUND

DOCTORATE – COMPUTER SCIENCE

Institute of Exact and Applied Sciences, University of New Caledonia

Since October 2021

- Title : « Evolving and Dynamic Attributed Graphs: Application to the risk mapping of Leptospirosis in New Caledonia ».
- Under the supervision of Pr. Nazha SELMAOUI-FOLCHER and Pr. Philippe FOURNIER-VIGER.

MASTER DEGREE – APPLIED MATHEMATICS AND STATISTICS

University of Bordeaux, France

2017 – 2019

- Minor Statistic and Stochastic Modelling.

BACHELOR DEGREE – APPLIED MATHEMATICS AND COMPUTER SCIENCE

University of Bordeaux, France

2014 – 2017

- Minor Business Administration.

PROJECTS

HACKATHON (CASSINI.eu)

University of New Caledonia / L2K Innovation

2021 – June

- European entrepreneurship-oriented Hackathon.
- Final ranking: 1st in France, 3rd in Europe.

BIGDATA PROJECT (Airbus Defence and Space)

INSA Toulouse / University of Bordeaux, France

2019 – October to December

- Contest between multiple schools.
- Subject : Use of Deep Learning for the classification of satellites images containing wind turbines.
- Final ranking: 7th/64.



Noumea, New Caledonia



March, 7th 1996



Driving licence



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[Research Gate](https://www.researchgate.net/profile/Rodrigue-Govan)

SKILLS

Computer Science

- Python, R/RStudio, Matlab, SQL, PostgreSQL, Linux, QGIS, HTML/CSS, PHP.

Language

- French (fluent)
- English (fluent)
TOEIC (April 2018) : 820/990 points
- Vietnamese (mother tongue)

REFERENCES

Pr. Nazha SELMAOUI-FOLCHER
Professor in Computer Science
nazha.selmaoui@unc.nc
ISEA, University of New Caledonia

Pr. Philippe FOURNIER-VIGER
Distinguished Professor in Computer Science
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BigData Institute, Shenzhen University, China

Pr. Jérémie BIGOT
Professor in Applied Mathematics
jeremie.bigot@math.u-bordeaux.fr
IMB, University of Bordeaux, France

COMMUNICATIONS

- April 2023 Scientific research at the service of data.
Oral communication. Meetup « data ». ISI.nc – OoTech
- November 2022 Popularizing science (Speed-Searching).
Oral communication. Science Fair. University of New Caledonia
- September 2022 Evolving and Dynamic Attributed Graphs: Application to the risk mapping of Leptospirosis in New Caledonia.
Poster. Doctoriales. Pacific Doctoral School (ED469)

SCIENTIFIC PUBLICATIONS

- [7] Thibeaux, R., Genthon, P., Govan, R., Selmaoui-Folcher, N., Tramier, C., Kainiu, M., Soupé-Gilbert, M.-E., Wijesuriva, K., Goarant, C. (2023). **Rainfall-driven resuspension of pathogenic *Leptospira* in a leptospirosis hotspot.** *Science of The Total Environment*, 168700.
[10.1016/j.scitotenv.2023.168700](https://doi.org/10.1016/j.scitotenv.2023.168700)
- [6] Govan, R., Selmaoui-Folcher, N., Giannakos, A., Fournier-Viger, P. (2023). **Co-location Pattern Mining Under the Spatial Structure Constraint.** In: Strauss, C., Amagasa, T., Kotsis, G., Tjoa, A.M., Khalil, I. (eds) *Database and Expert Systems Applications. DEXA 2023. Lecture Notes in Computer Science*, vol 14146. Springer, Cham. [10.1007/978-3-031-39847-6_13](https://doi.org/10.1007/978-3-031-39847-6_13)
- [5] Govan, R., Selmaoui-Folcher, N., Giannakos, A., & Fournier-Viger, P. (2023, July). **Extraction de co-localisations sous contrainte de la structure spatiale.** In *CNIA 2023-Conférence Nationale en Intelligence Artificielle, PFIA* (No. 53-61). [hal-04164263](https://hal.archives-ouvertes.fr/hal-04164263)
- [4] Tokotoko, J., Govan, R., Lemonnier, H., Selmaoui-Folcher, N. (2022). **Multiscale and Multivariate Time Series Clustering: A New Approach.** In: Ceci, M., Flesca, S., Masciari, E., Manco, G., Raś, Z.W. (eds) *Foundations of Intelligent Systems. ISMIS 2022. Lecture Notes in Computer Science()*, vol 13515. Springer, Cham. [10.1007/978-3-031-16564-1_27](https://doi.org/10.1007/978-3-031-16564-1_27)
- [3] Scherrer, R., Govan, R., Quiniou, T., Jauffrais, T., Lemonnier, H., Bonnet, S., & Selmaoui-Folcher, N. (2022). **Real-Time Automatic Plankton Detection, Tracking and Classification on Raw Hologram.** In *International Meeting on Computational Intelligence Methods for Bioinformatics and Biostatistics* (pp. 25-39). Springer, Cham. [10.1007/978-3-031-20837-9_3](https://doi.org/10.1007/978-3-031-20837-9_3)
- [2] Scherrer, R., Govan, R., Quiniou, T., Jauffrais, T., Lemonnier, H., Bonnet, S., & Selmaoui-Folcher, N. (2021, November). **Automatic Plankton Detection and Classification on Raw Hologram with a Single Deep Learning Architecture.** In *CIBB 2021 Computational Intelligence Methods for Bioinformatics and Biostatistics*. [hal-03565469](https://hal.archives-ouvertes.fr/hal-03565469)
- [1] Tokotoko, J., Selmaoui-Folcher, N., Govan, R., Lemonnier, H. (2021). **TSX-Means: An Optimal K Search Approach for Time Series Clustering.** In: Strauss, C., Kotsis, G., Tjoa, A.M., Khalil, I. (eds) *Database and Expert Systems Applications. DEXA 2021. Lecture Notes in Computer Science()*, vol 12924. Springer, Cham. [10.1007/978-3-030-86475-0_23](https://doi.org/10.1007/978-3-030-86475-0_23)