

# Zihao-Éric GUO



Paris, France

Kaggle Expert

Welcome to my homepage

#### **IT SKILLS**

Python (NumPy, Pandas, Sklearn, PyTorch, Plotly), R, C/C++, NoSQL, MATLAB, Power BI, Catia, CAD

Hilbertian analysis, Stochastic Process, statistical learning, Bayesian methods and hierarchical models, Probabilistic numerical methods, Databases, Uncertainty Quantification, Algorithms & Programming, Physics and Fluid Dynamics, Data Science & Machine Learning, Optimization, Signal and Systems, Finite Elements.

## **LANGUAGES**

Chinese: Native language

English: Fluent (GRE 326)

French: Fluent (DALF C1)

Spanish: Beginners

### **INTERESTS**









### Aces

- Team spirit;
- independence and adaptability;
- High learning capacity.



Graduating engineer students at École Centrale de Nantes Interested in: Reinforcement Learning, Explainable AI





Data Engineer | Data Scientist



#### **EDUCATION**

Since 09/2021

Nantes, France

École Centrale de Nantes

Generalist Engineer Degree - Applied Mathematics Options In Graduation Internship, Expected graduation date: 10/2023

09/2017 - 07/2021

Université de Picardie Jules Verne

Amiens, France Shenyang, Chine double diploma-Bachelor of Engineering, Production Optimization
The average GPA: 3.5/4, Top 3%, outstanding college

students in Shenyang area.

• The experience as Student Council President.



### PROJECT EXPERIENCE AND INTERNSHIP

2023

Internship – Biostatistics Researcher Inter (EMBL-EBI)

Since 04/2023

Cambridge, UK

• The research topic is "Simulating the evolution of genomes along large, short-branch phylogenetic trees"

Keywords: R/Python, Sampling algorithm, Cluster, bash (UNIX)

Internship – Data engineer (IFPEN)

<u>04/2022 - 08/2022</u>

Paris,

2021

2020

Shenyang,

Chine

Nantes,

France

2022

France

• Analysis of traffic badge validation data and create a dashboard.

• Comparison of data obtained from a traffic model (MATSim) to explore errors.

• Using time series models (Sarimax, Neuralprophet...) to analyze the impact of influencing factors and correct the statistics by predicting the data.

Keywords: Django, HTML/CSS, MongoDB, Git, Pytorch, Statsmodels

**Project - Analysis of Tencent product user churn** 

11/2021 - 01/202

• To predict the user churn rate and provide a foundation for the churn recovery strategy.

 A classification model is developed, the model is evaluated with roc auc score, and the parameters are tuned with GridSearchCV.

Keywords: Sklearn, Machine Learning

Project – Build a student management system

12/2019 - 02/2020

 Built in VC++ 6.0, Windows platform, utilizing the C language, using structures to encapsulate variables and chained tables for modification operations makes it easier to manage fundamental student information.

Keywords: C language, 00P



# SCIENTIFIC RESEARCH EXPERIENCE

Research - Multi-task learning for Bayesian Networks

Oct.22 - Apr.23

Nantes Digital Science Laboratory (LS2N)

Nantes, France

Keywords: C++, Linux, Bayesian Networks, Transfer learning

Research - Extreme value theory with environmental applications <u>École Centrale de Nantes (ECN)</u>

Keywords: Statistical Modeling

Essay - CNN text classification method based on simulated annealing method

ACM - International Conference Proceeding Series (ISBN: 978-1-4503-8432-2)

Essay - Mechanical gyroscope based one-rotor aircraft modification design

Fortune Time (2019.04), ISSN: 1004-0447

Competition - Based on non-stationary thermal conductivity, the design of special garments for high-temperature operations

2019 China Mathematical Modeling Competition Second Prize in Liaoning Province