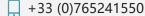


# Zihao-Éric GUO



Paris, France





#### 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.







Data Engineer | Data Scientist



#### **EDUCATION**

Since 10/2023

Institut Polytechnique de Paris

Paris, France

GRAPH-BASED REINFORCEMENT LEARNING OPTIMIZATION TO

OPTIMIZE URBAN MOBILITY

09/2021 - 09/2023

École Centrale de Nantes

Nantes, France

Generalist Engineer Degree - Applied Mathematics Options

09/2017 - 07/2021

Université de Picardie Jules Verne

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

students in Shenyang area.



# PROJECT EXPERIENCE AND INTERNSHIP

2023

Internship – Biostatistics Researcher Inter (EMBL-EBI)

UK

Cambridge, • 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)

12/2019 - 02/2020

Since 04/2023

2022

Paris.

France

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

· Comparison of data obtained from a traffic model (MATSim) to explore

• 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** 

2021

Nantes,

France

Chine

11/2021 - 01/2022• 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

2020

Project – Build a student management system

Shenyang,

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

École Centrale de Nantes (ECN)

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