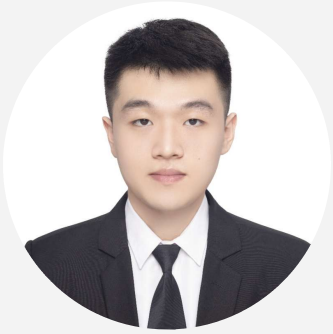

# Zihao-Eric GUO


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+33 (0)765241550

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.*

Pre-Doc @ Institut Polytechnique de Paris

Interested in: Stochastic Optimization, Math Programming

**Data Engineer | Data Scientist**

## EDUCATION

**Since 11/2023** — *Paris, France*

**Institut Polytechnique de Paris**

*Preserving graph performance in an exogenously perturbed environment*

**09/2021 – 09/2023** — *Nantes, France*

**École Centrale de Nantes**

*Generalist Engineer Degree - Applied Mathematics Options*

**09/2017 – 07/2021** — *Amiens, France*

**Université de Picardie Jules Verne**

*double diploma-Bachelor of Engineering, Production Optimization*

## PROJECT EXPERIENCE AND INTERNSHIP

**2023** — *Cambridge, UK*

**Internship – Biostatistics Researcher Inter（EMBL-EBI）**

*Since 04/2023*

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

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

**2022** — *Paris, France*

**Internship – Data engineer（IFPEN）**

*04/2022 – 08/2022*

- 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

**2021** — *Nantes, France*

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

*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** — *Shenyang, China*

**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, OOP

## SCIENTIFIC RESEARCH EXPERIENCE

**Oct.22 - Apr.23** — *Nantes, France*

**Research - Multi-task learning for Bayesian Networks**

*Nantes Digital Science Laboratory (LS2N)*

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 - Restoring Accessibility During Urban Rail Disruptions via Bus Network Redesign**

*Transportation Research Board (TRB) 104th Annual Meeting*

**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*