

Julien Nicolas

Computer Science and Information Technology
student (4th year) - INSA Lyon

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Lyon, France 📍

I'm passionate about Data Science, Algorithms and Software Development. I am flexible, autonomous, and highly motivated. I love research and problem solving. I'm looking for a 3-4 months internship in these fields starting May 2021.

EDUCATION

Master in Computer Science and Software Engineering INSA Lyon

2019 - 06/2022

2 first years of Engineering School (ranked 48th out of 800 students)

INSA Lyon

2017 - 2019

Science "Baccalauréat" - mathematics (18.5/20) "La Haie Griselle" High School - Gérardmer

2014 - 2017

WORK EXPERIENCE

Full-stack developer ETIC INSA Technologies

06/2020 - Present

Achievements/Tasks

- Full-stack development of a cross-platform mobile application which aims to improve the well-being of employees (in direct link with the client)
- Firebase & Flutter based (also : Dart, Freezed, BLoC...)
- Using Domain Driven Design

Data Scientist / R&D Intern Alstom

06/2020 - 08/2020

Achievements/Tasks

- Modelization of train dynamics in order to cross-check operating data and to avoid using expensive weight sensors : data wrangling, data analysis
- Spectral vibration analysis in order to enhance passengers comfort by identifying uncomfortable rail sections : Data Visualization, Wavelet & Fourier Analysis, Data consolidation, optimization
- R programming, Tableau Server reports automation

Mathematics tutoring First Cycle of INSA Lyon

2019 - Present

Achievements/Tasks

- Helping first years engineering students overcome their learning difficulties in mathematics

SKILLS

Java

C / C++

R

Mathematics / Algorithmics / Data Analysis

Dart / Flutter / Firebase

JavaScript / HTML / CSS

Mutex / POSIX

UML

Agile Development

PROJECTS

Hand gesture recognition gantlet enabling an easier communication with connected objects

- creation of the circuit, integration of the sensors
- implementation of the communication protocol between the gantlet and the computer (Bluetooth)
- persistence management in the application (Java, JPA)
- evaluation of the similarity between gestures in order to recognize the gestures (Dynamic Time Warping, Reinforcement learning)

Secure online chat using mainly Java and SQL

Application for optimising delivery tours in cities

- Understanding the needs of the client
- Algorithmic optimization (research : state of the art of shortest path algorithms, traveling salesman problem with constraints using) using heuristics and graph theory
- Development in Java

ORGANIZATIONS / HOBBIES

Ski Jump

active member for 7 years, competed at European level: gained determination and confidence

Classical guitar school

for 10 years, gained determination and a taste for improvement and perpetual improvement

Computer Science Students Association - INSA Lyon

team management, negotiation and planning

LANGUAGES

English

Full Professional Proficiency

French

Native or Bilingual Proficiency

German

Professional Working Proficiency