

# Environmental Engineering Internship

## *Meteorology and Air Quality*

**Position Title** Environmental Engineering Intern

**Job Category:** Vacation Student / Internship / Graduate

**Business Line :** Environment

**Location :** Nantes, Pays de la Loire (44)



### **About ATMOTERRA:**

As a freelance consultant, Adrien Bouzonville, manager of ATMOTERRA offers clients expertise in air quality, impact analysis and permitting, environmental health and safety management consulting/due diligence, remediation consulting/engineering and construction/site restoration, specialty and emerging technologies and waste services.

At ATMOTERRA, our values are anchored in the way we work and live. They are not just blank random statements, we commit to comply with them every day (Carbon Neutrality of 100% of our projects, renewable energy, Global Compact, 1% for the Planet...) for every project and we expect our partners and team to adopt them fully.

### **Job Summary**

ATMOTERRA is actively seeking a highly motivated Environmental Engineering Intern for employment in Nantes. ATMOTERRA is searching for candidates that have the ability to be a role model, be client-focused, be impactful and be decisive.

### **Main topic**

The main focus of the internship will be to evaluate and validate modeled meteorological data we recently modeled (wind speed, direction, temperature, pressure, rainfall...) using WRF over France. Weather Research and Forecasting (WRF) Model is a next-generation mesoscale numerical weather prediction system designed for both atmospheric research and operational forecasting needs. The developed dataset available should be assessed and validated by comparison to meteorological observation data publicly available from Météo France. Appropriate statistical analysis should be carried out to evaluate and validate the dataset in different locations.

Based on the results, further refinements could be envisaged (nesting, change of physical schemes used in the model, ...) and there is an opportunity to learn how to run WRF. Additional work would then be required to extract weather data suitable for air dispersion models (e.g. US EPA AERMOD) using the latest US EPA tools.

### **Additional topics**

There will be also other opportunities to work on various projects including, but are not limited to:

- Participate in a ongoing project and perform a solvent management plan for a metal surface treatment plant. This includes reviewing the process condition, the products used and compare the emissions to the BAT (Best Available Techniques) and Reference Document (BREF). Further work will also be required to provide solvent emission prevention measures, reduction and treatment measures (including cost-benefit assessment);
- Assist with field work (e.g., air quality sampling, air quality sensor use, environmental audit..);

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- Perform assignments requiring application of standard techniques, procedures and criteria to carry out engineering tasks. Assignments are designed to further develop judgment and understanding of professional and ethical responsibilities;
- Prepare engineering related calculations and develop drawings and visual aids;
- Prepare proposals and participate in the delivery of various projects in different environmental fields (Environmental Impact Assessments, Audits, Major Hazards studies, waste management, Contaminated Land...).

### Minimum Requirements

- Currently in pursuit of Bachelor's degree or a Master's degree in Environmental Engineering or other related field required (physics, chemistry, ...)
- Internship contract required from your faculty or Engineering School

### Desired Skills

- Capable of using spreadsheet, word processing and standard office software (including Open Source alternative);
- Good knowledge of statistical analysis tools and methods. An experience with R would be valued;
- Knowledge of Linux / Unix environment (or the ability to learn);
- Experience in GIS software would be an advantage;
- Open minded and eager to learn in various domains;
- Capable of working independently;
- Fluent in English and/or French.

### Employment condition

- Desired duration: 3,5 months starting May 2017
- Location: Nantes (the position will be based in a co-working place in the city center of Nantes)
- Stipend : 3,6€/h, 35h/week (i.e. average of 530€/month)

ATMOTERRA is an equal opportunity employer and Minorities, Females, Veterans, and Disabled persons are encouraged to apply. You are welcome to send an anonymous CV.

For more information and/or submit application (provide a CV, a cover letter, reference letters are appreciated), please contact Adrien Bouzonville: [contact@atmoterra.com](mailto:contact@atmoterra.com)



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