



## Apply here

### Start date

Flexible

### Duration

6 months

### Languages

Good spoken and written English levels are required (B2 onwards)

### Location

Plymouth, England

Plymouth, situated in the South West of England is a buzzing city with a rich maritime history, and still home to the largest naval base in Western Europe. Undergoing recent regeneration, the history-rich Barbican district and Plymouth Hoe are now the places to go for a great social scene with cafes and bars aplenty. The beautiful surrounding countryside and nearby beaches are a playground for outdoor and water sports activities ensuring something for all tastes.

### Are you eligible?

Are you a registered student?

Or

Are you eligible to participate in the Erasmus+ programme?

### Benefits

See website for details of all ESPA benefits. For all internships over 6 months, additional benefits will be paid. Details available at interview.

## Role

This is a great opportunity for a motivated student with competent programming skills to work on this innovative application. Mentored throughout, you will assist in the further development and fine tuning of the application, taking it the next level and ensuring continued success in its niche marketplace. This will not only be a great addition to your CV but also show you can adapt and apply your skills to any complex situations.

## Tasks

- Incorporation of code to carry out a complete analysis of voids, including identification of clusters, and to output the results graphically and as a .csv file.
- Incorporation of speeded-up wetting algorithms
- Improved output of interim steps in simulated intrusion
- Checking of ability to interpret latest Micromeritics porosimetry outputs
- Improvement of materials 'database' to allow free choice of binary combinations of materials, particularly air displacing water
- Incorporation of ability to specify different contact angles for different feature sizes, and to change sizes of features to model e.g. advance wetting fronts and different feature sizes.
- Automated searching for correct of cluster ratio

## Desired Skills

- Degree, and preferably higher degree, in relevant subject such as or computer science, physics, or chemical engineering.
- High motivation, initiative and independence.
- Demonstrable programming ability in languages such as C#, Python and Windows Presentation Foundation.
- Understanding of the programming environment of a large software package, and willingness and ability to work in such an environment.

## The Host Company

This innovative host company, based in Plymouth provides software to which generates void structure models from experimental data for any porous solid, and models the behaviour of fluids within the pores. Applications include design of paper coatings for optimum printing, study of soil properties to predict weathering, and study and prediction of graphite nuclear core ageing. This unique application is quickly gaining a worldwide reputation as the leading software in this field.