

CANDIDATE BRIEF

Mobile Applications Developer, Faculty of Environment



Salary: Grade 7 (£33,797 – £40,322 p.a. pro rata) Reference: ENVEE1385

Part time (50% of full time equivalent) Fixed term for 8 months (flexible working hours) We will consider job share / flexible working arrangements

Mobile Applications Developer, School of Earth and Environment, Faculty of Environment

Are you a creative software developer looking for your next challenge? Do you have a background in smartphone application development that you wish to apply to an international development challenge? Would you like to be working alongside cutting-edge weather science to deliver forecast solutions to weather services in the developing world?

The School of Earth and Environment (SEE) is seeking to appoint a Mobile Applications Developer to work within the Centre for Environmental Modelling and Computation (CEMAC) to develop products for the Global Challenges Research Fund African Science for Weather Information and Forecasting Techniques (GCRF African SWIFT) programme.

CEMAC is an established research computing centre within SEE with capabilities in computer modelling, data analysis and visualisation. The successful candidate would join a growing team of approximately 10 software developers and specialist research computing scientists already working on a broad range of scientific computing projects across the School.

The SWIFT project aims to develop sustainable African weather forecasting capability to enhance the livelihood of African populations and improve the economies of their countries. Throughout tropical Africa, the national meteorological services (NMSs) currently lack the capability and resources to deliver bespoke, world-class forecast products for commercial customers whose activities may be affected by various weather phenomena e.g. agriculture, power generation, fisheries and transportation. SWIFT has been awarded funding to develop smartphone applications to deliver timely and relevant weather information, both to the public and commercial customers.

You will be working alongside scientists on the SWIFT project, taking leadership in the implementation of methods and processes to enhance CEMAC's expertise. You will lead on the development of a smartphone service to display existing 'nowcasting' products (weather forecasts on the 0 - 6 hour timescale). You will also engage with the national meteorological services of the partner countries and end users of the application to ensure that the application is fit for purpose and that the nowcasting information is displayed in a user-friendly way. Although it is not essential to the job,



the opportunity to travel to Africa to engage with users of the service is a possibility in this role.

You will have a degree (Bachelor's or equivalent qualification) in Computer Science or a closely allied discipline and evidence of the skills and expertise to develop and maintain user-friendly mobile application products.

What does the role entail?

As a Mobile Application Developer, your main duties will include:

- Taking leadership in the implementation of methods and processes to enhance CEMAC's expertise in this field;
- Engaging with users to understand their requirements;
- Leading on the development and testing of a smartphone application to deliver nowcasting products to public and commercial users;
- Liaising with scientific and operational experts to refine the nowcasting products;
- Contributing mobile application development expertise to CEMAC;
- Maintaining effective coding documentation to ensure traceability and reproducibility of the product and its output across the application development lifecycle;
- In addition, we will encourage the holder of the role to be part of a small team travelling to Africa to engage with relevant parties. However, this travel will not be essential to the role.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Mobile Application Developer, you will have:

- A Bachelor's degree in Computer Science or a closely allied discipline;
- Evidence of the skills and expertise to develop, test and maintain user-friendly smartphone applications, particularly for the Android operating system;
- A good knowledge of Java or Kotlin;
- Proficiency in Python;



- Knowledge of software design and programming principles;
- Excellent problem solving skills;
- Ability to take possession of and lead on the development of solutions for complex problems in a multi-disciplinary team environment;
- Experience of working within a software life cycle (liaising with user needs, code design, code testing, source code repositories, version control);
- Good time management and planning skills with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- Ability to work both independently and within a team of mixed expertise;
- Excellent oral and written communication skills, including skills in preparing and making short presentations and documentation on computing topics.

You may also have:

- Experience of working within a University;
- Willingness to travel to Africa as part of a small team;
- Experience with cross-platform app development frameworks.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Prof Douglas Parker

Tel: +44 (0)113 343 6739Email: D.J.Parker@leeds.ac.uk

Additional information

Find out more about our Faculty

Find out more about our School



Find out more about the GCRF African SWIFT project

Find out more about Athena Swan in the Faculty





A diverse workforce

The Faculty of Environment has received a prestigious Athena SWAN silver award from <u>Advance HE</u>, the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our <u>Criminal Records</u> information page.

