

## Software Research Assistant | Full Stack Developer

Apply Online: <https://bit.ly/3ri2QBc>

Salary: £28,331 (capped due to funding)

FTE: 1

Term: Fixed (18 months)

Closing date: 16<sup>th</sup> July, 2021

**SUMMARY:** This multidisciplinary project will explore the development of new computer vision tools for enhanced understanding of catalytic reaction kinetics, catalyst deactivation monitoring, and related processes. You will have additional training and exposure to lab-based synthetic chemistry, analytical software development, research commercialisation, video production, and industrial collaborations.

**Keywords:** *computer vision, image processing, chemical industry, full stack development*

### The Role

You will be joining a vibrant multidisciplinary team working at the boundary between Chemistry and Computer Vision. As part of a major new UKRI-funded research programme, you will help design and realise a web-deployable software platform to help chemical researchers maximise productivity. You will be helping the molecule makers of today access the hidden data they need to make the medicines of tomorrow.

If you have interests in software design, enterprise platforms, photography, self-driving cars, and entrepreneurship, this is the opportunity for you to apply these interests by engaging directly with more than 5 major end-user companies.

You will lead both publishable and patentable research activities as part of a team, working under the general supervision of Dr Marc Reid (the UKRI Future Leaders Fellow). You will manage and prioritise your own workload, embracing AGILE principles to collaboratively adapt and refine your approach in this fast-paced environment. You will input as a team member to strategic discussions and software demonstrations with our end-user partners. You will learn to translate ideas through video production methods taught to you by the team lead.

### Qualifications

To be considered for the role, you will be educated to a minimum of Degree level in Computer Science (or closely related Engineering discipline) and you will have sufficient breadth or depth of knowledge in full stack web development. In addition, you will have knowledge of the Python programming language, version control, and application programming interfaces (APIs). You will have excellent opportunities to grow your interpersonal and communication skills, and to translate abstract programming ideas into powerful end-user engagements.

Whilst not essential for the role, applications are welcomed from candidates with: relevant work experience in computer vision, cloud computing, and knowledge exchange related activities.

### Enquiries

If you meet some but not all of the above requirements, please do not assume that you are not a good fit for this role. We are looking for someone who is keen to learn and keen to grow. Informal enquiries about the post can be directed to Dr Marc Reid, UKRI Future Leaders Fellow, [marc.reid.100@strath.ac.uk](mailto:marc.reid.100@strath.ac.uk) (enter Subject: “**Software Post UKRIFLF**”).

Group Overview: <http://www.dr-marc-reid.com/reid-group-research/overview>

Supervisor Biography: <http://www.dr-marc-reid.com/bio>

### How to apply

Apply at the official vacancy page, <https://bit.ly/3ri2QBc>, where you will be asked to provide:

- A one-page cover letter detailing your reasons for applying for this specific role.
- A two-page (maximum) CV.
- The names and email addresses of 2 referees, who may be contacted before interview.

Shortlisting and interviews will take place shortly after the deadline.

*See below for the official version of this advert.*

# Software Research Assistant | Full Stack Developer

Department	Pure and Applied Chemistry ( <a href="http://www.strath.ac.uk/science/chemistry/">www.strath.ac.uk/science/chemistry/</a> )		
Faculty	Faculty of Science ( <a href="http://www.strath.ac.uk/science/">www.strath.ac.uk/science/</a> )		
Staff Category	Research	Reference No	362113
Reports To	The Head of Department, through UKRI Future Leaders Fellow	Grade:	6
Salary Range:	£28331 (capped due to funding)	Contract Type:	Fixed Term (18 months)
FTE:	1 (35 hours/week)	Closing Date	Friday, 16 July 2021

## Job Advert

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## Job Description

### Brief Outline of Job:

To assist in the delivery of research activities as part of a team, working on an established research programme/s under the general supervision of senior colleagues; to input as a team member to administrative activities; to assist where required with relevant teaching and knowledge exchange activities.

### Main Activities/Responsibilities:

1. Assist in the design and delivery of the front-end client for an existing Python-coded back end computer vision stack.

2.	Understand and expand functionality of the existing computer vision back end,
3.	Engage with end-user partners to understand user experience and cyber security priorities.
4.	Contribute to the planning of research programmes.
5.	Assist with professional and knowledge exchange activities as required.
6.	Assist with the supervision of student projects and the delivery of introductory classes as required.
7.	Engage in continuous professional development.
8.	Assist the delivery of research projects by, for example, conducting literature reviews, developing questionnaires and conducting surveys, collecting and collating data and undertaking and recording the outcomes of experiments.
9.	Manage and prioritise own workload within agreed objectives to ensure that all activities are completed to deadlines.
10.	Write up results of own research and contribute to the production of research reports and publications.
11.	Input as a team member to Department/School, Faculty and/or University administrative activities.

## Person Specification

### Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

E1 Good honours degree in an appropriate discipline

D1 Higher degree (or equivalent professional experience) in an appropriate discipline.

D2 Membership/working towards membership of relevant Chartered/professional bodies (including Higher Education Academy).

### Experience

E2 Sufficient breadth or depth of knowledge in the relevant discipline/s to effectively contribute to the research programme/s.

D3 Some relevant work experience in web development and/or computer vision.

D4 Experience of relevant project supervision and teaching activities.

### Job Related Skills and Achievements

E3 Knowledge of appropriate research methods.

E4 Ability to plan and organise own workload effectively with general supervision from senior colleagues.

E5 Ability to work within a team environment.

D5 Experience of knowledge exchange and/or commercialisation related activities.

### Personal Attributes

E6 Good interpersonal and communication skills, with the ability to listen, engage, and to present complex information in an accessible way to a range of audiences.

## Application Procedure

Applicants are required to complete an application form including the name of three referees who will be contacted before interview without further permission, unless you indicate that you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

## Other Information

Further information on the application process and working at Strathclyde can be found on our website (<http://www.strath.ac.uk/hr/workforus>).

Informal enquiries about the post can be directed to Dr Marc Reid, UKRI Future Leaders Fellow (<http://www.dr-marc-reid.com/working-with-us>; enter Subject: "Software Post UKRIFL").

## Conditions of Employment

Conditions of employment relating to the Research staff category can be found at: [Conditions of Employment](#).

## Rewards and Benefits

Our staff have access to a wide range of outstanding benefits that include financial rewards, family friendly and wellbeing benefits and career development opportunities, details of which can be found [here](#).

## Probation

Where applicable, the successful applicant will be required to serve a 9 month probationary period.

## Pension

The successful applicant will be eligible to join the Universities' Superannuation Scheme. Further information regarding this scheme is available from [Payroll and Pensions](#).

## Interviews

Formal interviews for this post will be advised in due course.

## Equality and Diversity

We value diversity and welcome applications from all sections of the community.

The University currently holds a Bronze Athena SWAN award, recognising our commitment to advancing gender equality in academia across all academic disciplines and professional and support functions.

## University Values

The University's Values capture what we're all about: who we are, what we believe in and what we stand for. [Our Values](#) have been derived from how we act and how we expect to be treated as part of Strathclyde.



# Conditions of Employment

## Research Staff



### 1. GENERAL CONDITIONS

Members of staff are subject to the Charter and Statutes and the Ordinances and Regulations of the University, published in the Calendar, and to any amendments or additions thereto approved by the University Court and, in the case of the Charter and Statutes, the Privy Council. Staff are also expected to familiarise themselves with, and adhere to, general University policies and procedures, as published on University web pages.

The University Court recognises Strathclyde Universities and College Union (SUCU) as the sole body with which it will negotiate and consult on all collective issues concerned with the terms and conditions of employment of Research Staff. Such terms and conditions may be varied by the University Court after negotiation and consultation with SUCU.

Each member of staff is responsible for the proper performance of allocated duties to the person or persons specified in the member of staff's letter of appointment and any accompanying papers.

The University is committed to ensuring that its business is conducted in an open and transparent manner and will take all appropriate steps to address risks of bribery or corruption. Members of staff are required at all times to act honestly and with integrity and to safeguard the resources for which they are responsible. The University has in place a robust Public Interest Disclosure (Whistleblowing) Policy to enable concerns to be brought to its attention. This is available at [www.strath.ac.uk/publicinterestdisclosure](http://www.strath.ac.uk/publicinterestdisclosure). Other relevant policies, e.g. Fraud Prevention and Conflicts of Interests, can also be found on the University's website.

Any member of staff may at any time be exposed to commercially sensitive information, information related to potentially valuable intellectual property or information which may otherwise be of a confidential nature. This information, which could be found anywhere in the University, may be written or disclosed orally, can include information of a commercial or technical nature, and may be owned by the University or by third parties. The University requires all employees to keep any such information confidential in the first instance and not disclose, publish or otherwise disseminate it without prior consent of the University. Such confidentiality obligations are commonplace and in the commercial interests of the University. When in doubt advice should always be sought from Research and Knowledge Exchange Services prior to disclosure.

The University operates probationary periods for new staff, the duration of which will be specified in individual letters of appointment. The normal probation period for posts in this staff category is 9 months for those at grades 6 and 7, and 12 months for grades 8 and above. Further guidance on probationary procedures is published at <http://www.strath.ac.uk/staff/policies/hr/>.

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Further information on the terms and conditions specified in this document and other staffing policies and procedures can also be found at [www.strath.ac.uk/hr](http://www.strath.ac.uk/hr).

### 2. SALARY

Appointments are made at an appropriate salary point on the University's grading structure, with initial placing determined according to qualifications and experience. Increments are paid to staff on the 12 month anniversary of their appointment. Where this is not the first of the month, the increment will be paid on the first of the month directly

after the 12 month anniversary. This allows 1 progression to the next point on the salary scale until the top guaranteed point of the scale is reached.

Salaries are paid directly to staff members nominated bank account, normally on the second last working day of the month.

### 3. HOURS OF WORK

Working time is that required to fulfil the duties of the post. The University Court recognises that research staff carry out these duties in a variety of ways appropriate to the nature of the research activity, but expects regular contact to take place between the research staff employee and the supervisor/granholder (where these positions are occupied by different individuals) during normal working hours on week days. There are exceptions to this pattern which may involve contact at other locations or in the evenings, or at weekends, but these arrangements will be made with the agreement of the member of staff concerned.

Duties may, by arrangement with Head of Department/School/Director, include some teaching associated with the post (up to a maximum of 40 hours per semester) for which no additional payment will be made.

Additional work which does not fall within the scope of that described above may by arrangement attract payment which must be authorised and processed through the payroll.

### 4. HOLIDAYS

Annual leave entitlement is 31 days per year to be taken by agreement with the line manager. For staff members working on a part-time basis, holidays will be calculated on a pro-rata basis.

In addition to annual leave there is an entitlement to eleven public holidays per year which should be taken on days that the University is closed for this purpose. The University presently closes for four additional days over the Christmas and New Year period. **These additional days count against the annual leave entitlement.**

For staff members working on a part-time basis, public holiday entitlement will be calculated on a pro-rata basis.

Annual leave and public holiday entitlements should be taken in the leave year to which they relate. Up to five days leave can be carried forward into the new leave year subject to line management agreement. In exceptional circumstances, Heads of Department/School/Director may approve carry forward of accrued annual leave in excess of five days.

The University's expectation is that staff take all accrued holidays prior to their termination date. If staff have exceeded their entitlement the University will deduct an equivalent number of days pay from final salary payments.

## 5. SICKNESS ABSENCE

During any period of absence through illness or injury provided the appropriate notification and certification procedures have been followed the University will pay a member of staff (having taken account of the aggregate of all periods of absence due to illness during the twelve months immediately preceding the first day of the current absence) as follows:

<b>Period of Continuous Employment at start of absence from work</b>	<b>Full Pay</b>	<b>Half Pay</b>
Less than 1 year	1 month	1 month
1 year but less than 2 years	2 months	2 months
2 years but less than 3 years	4 months	4 months
3 years but less than 5 years	5 months	5 months
5 years or more	6 months	6 months

In order to manage the University's sick pay scheme the University requires to maintain sickness absence records on individual members of staff. When making payments after the expiry of statutory sick pay the University will deduct an amount equivalent to any benefit normally payable by the Department of Work and Pensions. For full details on the general University policy in this area please refer to the Sickness Absence Management Policy at [www.strath.ac.uk/staff/policies/hr](http://www.strath.ac.uk/staff/policies/hr).

## 6. PENSIONS

If you are under age 75 at the date your appointment commences you will automatically become a member of the pension scheme operated by the University – the Universities Superannuation Scheme (USS). You will be admitted to the career revalued benefits scheme called the USS Retirement Income Builder, the contribution rate that currently applies is 9.6% of pensionable salary. A threshold applies to the maximum salary that counts towards the USS Retirement Income Builder. From 1 April 2021, the threshold is £59,883.65 per year. Contributions based on salary above the monthly equivalent rate of the threshold are paid to the defined contribution section of the scheme called the USS Investment Builder. Information regarding USS can be found in the scheme booklet located on the website: [https://www.uss.co.uk/-/media/Project/USSMainSite/Files/For\\_members/Guides/Your\\_guide\\_to\\_Universities\\_Superannuation\\_Scheme.pdf](https://www.uss.co.uk/-/media/Project/USSMainSite/Files/For_members/Guides/Your_guide_to_Universities_Superannuation_Scheme.pdf). The scheme booklet is called 'Your Guide to the Universities Superannuation Scheme'.

The exception to automatic membership of the pension scheme applies if your post is located out with the UK in an EU member state. If this is the case membership of USS is not available to you.

The University operates a salary exchange arrangement, Pensions Plus, for members of the USS. Pensions Plus enables pension contributions to be made in a manner so that both employees and the University can benefit from available National Insurance Contribution savings. You will be automatically included in Pensions Plus, provided it does not adversely affect your take-home pay or your ability to claim certain state benefits. If your earnings fall below the Pension Plus pay protection limit you will be opted out of Pension Plus. This will not affect your membership of the USS.

New members of staff may opt out of USS within three months of taking up appointment and will then be treated as if they had never been a member of the scheme. After three months members of staff who wish to withdraw from USS during their employment will be required to give a minimum of 28 days' notice in writing to the University. Any member of staff who wishes to opt out should contact the Pensions Section, Finance, in the first instance ([pensions@strath.ac.uk](mailto:pensions@strath.ac.uk)). Please note that if you are a member of Pensions Plus and withdraw from USS with less than two years of membership, or cease employment with the University and have less than two years of USS membership, the option of a refund of pension contributions will not be available to you. Instead, USS must provide you with a pension benefit that is payable from your Normal Pension Age. Regardless of whether you participate in Pensions Plus, if you are a member of the pension scheme for two years or more you are not entitled to a refund of pension contributions on leaving the scheme, you will be entitled to a pension benefit.

The University reserves the right to alter or withdraw Pensions Plus as it sees fit or as required to comply with legislative changes. Withdrawal or amendment of Pensions Plus will not affect your membership of USS. If you do not wish to participate in Pensions Plus but wish to remain in the pension scheme please contact the Pensions Team who will provide you with a non-participation form.

Information regarding pension scheme membership can be found on the Pensions pages of the University's website. Full information regarding USS can be found on the USS website – [www.uss.co.uk](http://www.uss.co.uk)

## 7. PLACE OF WORK AND RESIDENCE

Members of staff will be based on the John Anderson Campus, unless otherwise stated in the letter of appointment. The Department/School in which the post is initially placed will be specified in the letter of appointment although there will be an expectation to work at such other places as required in the course of employment.

If the need arises for members of staff to work outside the UK for a period (or periods) of more than one month then such arrangements will be subject to mutual agreement. Members of staff would then be provided with a statement in advance setting out the terms covering such periods of employment.

The University does not normally place specific restrictions upon the place of residence of members of staff. All staff are, however, expected to reside in a location which is compatible with the satisfactory fulfilment of all the duties associated with their appointment.

## 8. CONSULTANCY/FURTHER ACTIVITIES

To support the strategic objectives of the University and to facilitate individual professional development, the University encourages staff to engage in professional activities with outside bodies related to their field of work. In many cases, such activity will be approved on the basis that it represents University knowledge exchange activity and should therefore be treated as part of the individual's overall workload and managed through the University's systems. It is also recognised that there will be some cases where an activity is entirely separate from the University and should thus be notified/approved as a personal business activity. For further information please refer to the "University Procedure in relation to Work for Outside Bodies including Consultancies", which forms part of the employment contract and can be accessed at [www.strath.ac.uk/hr](http://www.strath.ac.uk/hr)

## 9. DISCIPLINARY AND GRIEVANCE PROCEDURES

Further information on the University's disciplinary and grievance procedure can also be found at [www.strath.ac.uk/policies/hr](http://www.strath.ac.uk/policies/hr) or on request from Human Resources.

## 10. NOTICE AND TERMINATION

Members of staff are employed on the conditions indicated in individual letters of appointment and any accompanying papers. The University is not obliged to give notice of termination or continue any employment beyond the end of that period. Where the period of the contract of employment is for one year or less it may be terminated short of the fixed term period by one months notice on either side. Where the period of the contract of employment is for more than one year, or where there have been a further contract or series of contracts immediately consecutive, the employment may be terminated short of the fixed term period by three months' notice on either side, except during the probationary period when the notice period is one month.

If the appointment is for a fixed term it will expire at the end of the period without the necessity for notice.

Revised April 2021