

# Senior Software Test Engineer

## Job ref 44

### Vacancy Specification

The successful candidate will bring their experience and expertise in continuous software integration to ensuring the quality of the numerical tools underpinning First Light's approach. We are looking for someone with a deep understanding of Continuous Integration (CI) and Quality Assurance (QA) best practises, who will be able to use that knowledge, to maintain and develop further our current continuous integration systems.

Our primary numerical physics capability is an adaptive front-tracking hydro-code, with coupled conduction, radiation and microphysics models. The code is core to the business plan and a very important company asset. The successful candidate will provide invaluable support to the robustness and validation of this code, which is critical to the goals of the in-house experimental team. The team takes an agile approach using the Atlassian toolset.

This is a new position within the numerical physics team, as such there will be opportunity for the successful candidate to bring their own attributes to inform, develop, implement and manage software QA procedures within the role.

### Essential

- A degree in a technical discipline (e.g. engineering, physics, maths, computer science)
- Demonstrated experience in providing support and leadership to CI strategy and product deployment within a software development team
- Experience in the implementation of CI processes (e.g. unit testing and regression testing)
- Experience with administrating CI servers (e.g. Bamboo)
- Experience developing code in Python
- Strong grasp of software engineering best practice
- Demonstrated self-motivation, enthusiasm to work in a dynamic team environment and evidence of taking the initiative
- Strong communication and interpersonal skills
- Passion for fusion and for taking a bold approach to a high-risk transformational technology

### Desirable

- Experience with process management tools (e.g. JIRA)
- Experience with version control tools (e.g. Git)
- Experience of CI in HPC software development teams
- Experience in computational physics/engineering modelling
- Experience with C++

### Benefits

A competitive package and entry into a company option's scheme.  
Relocation packages will be considered.



## How to apply

Please send a covering letter / supporting statement and CV to [careers@firstlightfusion.com](mailto:careers@firstlightfusion.com) quoting the job title in the subject. Two referees should be available on request.

Informal enquiries may also be addressed to [careers@firstlightfusion.com](mailto:careers@firstlightfusion.com).

CVs sent by recruitment agencies will not be read, and in the event that the company receives a CV from both the direct applicant and a recruitment agency the CV will be treated as a direct application by the individual only. Unsolicited contact from Recruitment agencies will be disregarded.

## First Light Fusion

First Light Fusion Ltd is a lean, focused and agile corporation researching energy generation by inertial confinement fusion. The company was spun out from the University of Oxford in June 2011 and is based near Oxford. First Light continues to work closely with the academic community, both in the UK and internationally. The company is well-funded by both institutional investors and private individuals.

Inertial confinement fusion for energy generation is a well-established research field and is being pursued in many laboratories worldwide, perhaps most notably in the US at the National Ignition Facility. First Light is exploring a number of alternative research directions that harness the same fundamental physics, with the prime focus being power generation. First Light's work to-date has included theoretical analysis, detailed numerical simulation and experimental validation. This has allowed description of the accessible parameter space and has led to a clear vision of the pathway to fusion.

First Light has also considered the costs and engineering practicalities of a reactor implementing its technology and can articulate a number of advantages over other approaches. Additionally, the energy focusing processes being pursued form the foundations of a new technological platform where secondary opportunities exist in a number of alternative applications, for example material processing and chemical manufacture.

