

## ONE OPEN POSITION - WEB/DATA ENGINEER

An open position for a Web/data engineer is available at EPFL (Lausanne, Switzerland) in the [MARVEL NCCR](#), a new Center for "Computational Design and Discovery of Novel Materials", directed by Prof. Nicola Marzari and involving 25 principal investigators (more information is given in the link above).

Excellent candidates are sought with experience in the development and maintenance of complex web portals to support the deployment of massive open-access data generated by materials simulations.

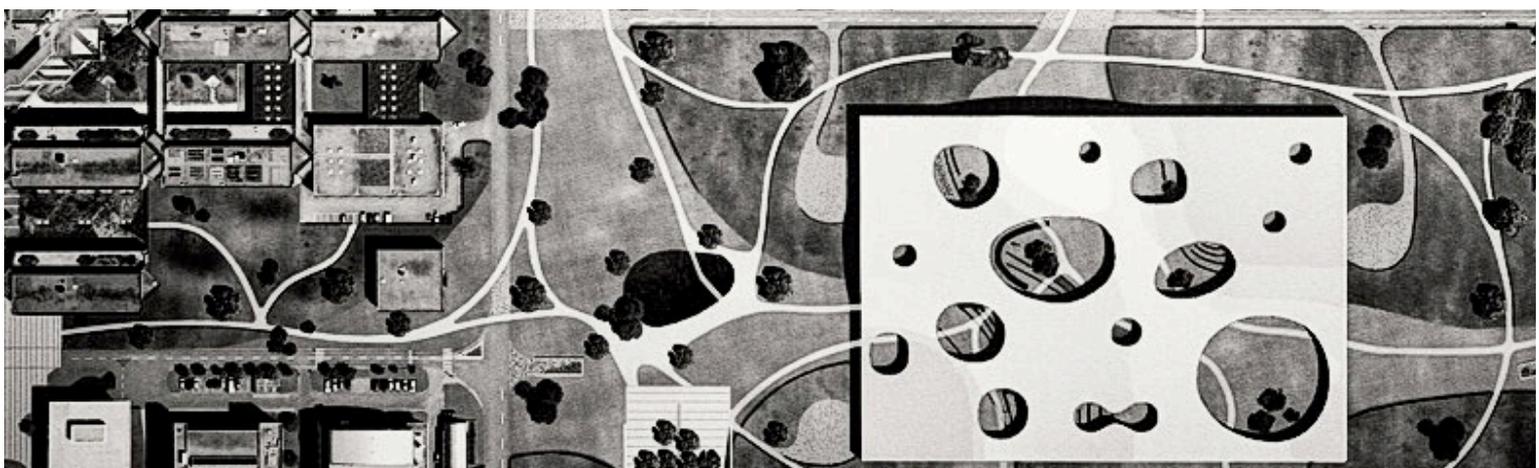
Data would be typically generated using AiiDA ([www.aiida.net](http://www.aiida.net)), a complex framework that acts as a flexible and scalable infrastructure for high-throughput computational materials science. AiiDA is the main infrastructure underpinning the high-throughput efforts of the center; the web/data engineer would work with two software engineers and a team of PhDs/postdocs contributing to the AiiDA project.

### Major duties and responsibilities:

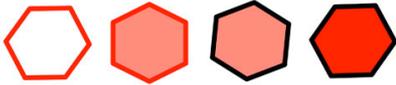
- develop a web portal to share and disseminate data, calculations, codes, and workflows
- develop a cloud-based environment to access simulation tools and computational resources
- manage the scalability and efficiency of queries and requests
- ensure that the portal supports and interfaces securely with petabyte storage resources, both local and at remote HPC centers
- maintain the web services, ensuring integrity and security
- communicate with users for support, feedback, and strategic development

### Skills and experience:

- creating/managing a high traffic-load web service; web analytics
- web (HTML5, JavaScript, AJAX, jQuery) and app design



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- database systems (SQL/NoSQL, database triggers, transactions, ...) and handling large amounts of data
- managing large codes/projects in a team (revision control systems, issue trackers, unit test and continuous integration frameworks, ...)

## Further optional skills:

A scientific background (e.g. physical or engineering sciences) is welcome, but not required. For interested applicants, scientific research challenges can also be incorporated in the effort.

Typical candidates will be independent, motivated and passionate, and have a MSc in computer science (or comparable skills and experience), while a PhD in science or engineering would be appropriate for research-oriented applicants. Preference will be given to candidates with demonstrable experience in similar subjects.

## The environment:

The position will be hosted in the Laboratory for Theory and Simulation of Materials, led by Prof Nicola Marzari (see <http://theosrv1.epfl.ch>). EPFL offers a thriving intellectual environment, outstanding computational resources and facilities, and a very lively and active community. It is located in Lausanne, on the shores of Lake Geneva and in close proximity to the Swiss and French Alps.

## Application:

Candidates should submit a full CV, including contacts for at least two references, and a cover letter of intent to [nicolas.mounet@epfl.ch](mailto:nicolas.mounet@epfl.ch) and [nicola.marzari@epfl.ch](mailto:nicola.marzari@epfl.ch), with “MARVEL Web Engineer” in the subject line (PDF attachments only). For best consideration applications should be submitted by **Jan 15 2015**, but the positions will remain open until filled. Shortlisted candidates will be contacted individually for interviews, usually over Skype videoconferencing.

Duration of the contract: 1-year, and renewable. Salaries for a MSc would start typically at ~75,000 CHF.

