## Profil de poste

### Emploi-type
E1C43 - Chef-fe de projet ou expert-e en Ingénierie logicielle / Software and web engineer

### BAP
E

### Missions
We are seeking a talented and motivated developer to contribute to the development of an analytical software and its deployment to a community of scientists. This project is part of an ongoing collaboration between the Necker Institute (INEM) and the Pasteur Institute. The existing software is an analytical suite allowing a range of data pre-processing, automatic or manual quality control, advanced association testing using a recently developed regression algorithms, and result visualization functions. It targets the analysis of large multidimensional health data, including for example data generated by the next generation of high-throughput sequencing. The project is written in java and JavaScript, it uses spring-boot on the server side and Angular 8 for the front end, and it is currently deployed on an AWS EC2 instance. The software is operational but has some limitations. The objective of the project is to address these limitations to allow for full usability to a community of up to hundreds of users. The project involves collaborations with experts in health sciences, including clinicians, epidemiologists, microbiologists, statisticians, and computer scientists.

### Activités principales
- The software currently handles users and projects in a single main page. The first objective is to improve access control and to develop solutions to compartmentalize projects and users.
- The software implements several advanced analytical steps (data pre-processing and statistical analyses). The second task will be to improve the existing code to enhance the scalability and the efficiency of the software.
- The validated upgrades will then be deployed on a dedicated server (AWS or some private cluster) for beta-testing, with the help of IT engineers.
- The last objective of the project will be to provide support to the beta-testers, collect feedback, and to engage with the rest of the group on selecting priorities for potential new functionalities.

### Connaissances
**QUALIFICATIONS**
Applicants should have a master or engineer degree in Computer Science or other relevant disciplines. The candidate should be proficient with java, javascript, and postgres. Some basics in mathematics and statistics are required. Previous experience in software development is appreciated. Recently graduate candidates will be considered.

### Spécificité(s) / Contrainte(s) du poste
/

### Expérience souhaitée
Previous experience in software development is appreciated
Diplôme(s) souhaité(s) : Recently graduate candidates will be considered. – Engineer diploma

Structure d'accueil

<table>
<thead>
<tr>
<th>Code unité</th>
<th>U1151</th>
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<tbody>
<tr>
<td>Intitulé</td>
<td>Inserm U1151/CNRS UMR 8253/ Université de Paris - Institute Necker Enfants Malades (INEM)</td>
</tr>
<tr>
<td>Responsable</td>
<td>Equipe 1 « Plasticité du génome et infections » -</td>
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<tr>
<td>Composition</td>
<td>11 personnes au total : 2 PUPH, 1 MCU PH, 1 DR2, 1 CRCN, 2 post-doctorants 2 ITA 1 H-U, 2 doctorants</td>
</tr>
<tr>
<td>Adresse</td>
<td>Faculté de Médecine Necker - 156-160 Rue de Vaugirard – 75015 Paris</td>
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<tr>
<td>Délégation Régionale</td>
<td>DR PARIS 5</td>
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Contrat

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<thead>
<tr>
<th>Type</th>
<th>CDD – 1 year renewable</th>
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<tbody>
<tr>
<td>Durée</td>
<td>24 months</td>
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<tr>
<td>Rémunération</td>
<td>Between 2 476,05 € Brut/month à 3 286,92 € Brut/month (according to experience)</td>
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<tr>
<td>Date souhaitée de prise de fonctions</td>
<td>01/11/2021</td>
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Pour postuler

Adresser votre CV et lettre de motivation en précisant l’offre de référence 2021-U1151-01 à :

Candidates should send their curriculum vitae, a cover letter detailing research experience, and contact information from three referees to Pr. David Skurnik (david.skurnik@inserm.fr) and Dr. Hugues Aschard (hugues.aschard@pasteur.fr).

Applicants may start as early as possible and applications will be considered until the position is filled.

More details about our teams and ongoing projects can be found at the INEM and Pasteur websites:

Hugues Aschard: https://research.pasteur.fr/en/team/statistical-genetics/