



**JOB DESCRIPTION**

Job Title : PhD position in image analysis and deep learning applied to biological 3D imaging

**Job Summary :**

(English, max 1000 characters)

A PhD position is available at University of Strasbourg in the field of image analysis and deep learning applied to biological imaging. The objective is the development of robust segmentation tools dedicated to biological FIB-SEM imaging for the purpose of quantitative description of the three-dimensional organization of cells.

This subject, at the interface of biological imaging (Schultz team, IGBMC) and digital image analysis (IMAGeS team, ICube) is extended through a collaboration with a team of clinicians from Hautepierre Hospital (Dr. L. Mauvois, UMR S-1113) on the morphological study of different populations of normal lymphoid B cells and from patients with chronic lymphocytic leukemia, the objective being to be able to improve the diagnosis of the different forms or stages of the disease.

**Job Description :**

(English, detailed information – max 3000 characters)

The PhD student will conduct his research within the IMAGeS team of the ICube laboratory, University of Strasbourg, on the Illkirch campus site, and will actively collaborate with the IGBMC Integrative Structural Biology team to gain expertise in the field of biology and biological image acquisition processes.

Supervisors : Benoît Naegel - ICube - [b.naegel@unistra.fr](mailto:b.naegel@unistra.fr) and Patrick Schultz- IGBMC - [patrick.schultz@igbmc.fr](mailto:patrick.schultz@igbmc.fr)

A detailed description of the subject is available here: [http://images.icube.unistra.fr/en/img\\_auth.php/g/g0/2019-These-DeepMorpho-en.pdf](http://images.icube.unistra.fr/en/img_auth.php/g/g0/2019-These-DeepMorpho-en.pdf)

Applications should include a detailed resume, including grade sheets for B.Sc. and M.Sc.

Names and complete addresses of referees are welcome.

Please send applications by email to: [b.naegel@unistra.fr](mailto:b.naegel@unistra.fr)

Main research field : Computer science, Biological sciences, Engineering, Mathematics, Physics, Technology , Medical sciences

**Offer Requirements :**

REQUIRED EDUCATION LEVEL : Master's degree or equivalent in computer science or applied mathematics

**Skills/Qualifications**

- Image processing, machine learning, deep learning
- Programming skills in C++ and Python

**Eligibility criteria :**

--

#### JOB DETAIL

Type of contract : Doctoral contract
Status : PhD thesis
Company / Institute : ICube Laboratory, University of Strasbourg
Country : France
City : Illkirch
Postal Code : 67411
Street : 300 boulevard Sébastien Brant

#### APPLICATION DETAILS (mandatory)

Provisional start date : 01/09/2019
Application deadline : 01/06/2019
Application e-mail : b.naegel@unistra.fr