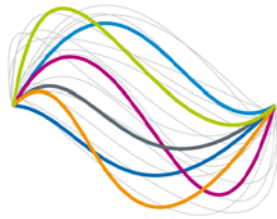


# UBFC

UNIVERSITÉ  
BOURGOGNE FRANCHE-COMTÉ

<b>Job title</b>	<b>Postdoctoral position in 3D vision</b>
<b>Job type</b>	Post-Doctoral position
<b>Contract duration</b>	12 months
<b>Estimated net salary per month (€)</b>	2200
<b>Qualifications</b>	PhD in Computer Vision
<b>Experience</b>	PhD in 3D vision
<b>Job hours (full time/ part time)</b>	Full time
<b>Employer</b>	UBFC
<b>Host Laboratory</b>	FEMTO-ST Institute
<b>URL Host Laboratory</b>	<a href="http://www.femto-st.fr/">http://www.femto-st.fr/</a>
<b>Job description</b>	<p>The department specialized in microrobotics of the multidisciplinary FEMTO-ST Institute (<a href="http://www.femto-st.fr/en/">http://www.femto-st.fr/en/</a>) based in Besançon, France, has a one-year postdoctoral position in computer vision, more particularly in 3D vision. The applicant will be involved in a project including a SME that designs, products and sells custom micro optical components. The objective of the project is the development of technologies enabling the assembly of micro optical components on the tip of a 200 <math>\mu\text{m}</math> - diameter optical fiber. The typical requirement of manipulation is an accuracy of some tens of nanometers. The components will be used for antennas, photonic crystals or axicon lasers. For the achievement of the project, the consortium has multiple microrobots installed inside the clean room of a dual beam (electrons-ions) microscope. The latter protects the objects and enables the visual feedback of the micromanipulation scene which will be used to control and monitor the micromanipulation tasks.</p> <p>The work of the applicant will include:</p> <ul style="list-style-type: none"><li>- active participation in the management of the project,</li><li>- development a photometric 3D reconstruction of the micro optical components from the different types of image detectors installed in the microscope,</li><li>- development of 3D motion measurement of the micro optical components from their point clouds,</li><li>- application of the developed 3D reconstruction and motion to the monitoring and control of the components.</li></ul> <p>The applicant will have the following skills:</p> <ul style="list-style-type: none"><li>- strong background in computer vision along with C++,</li><li>- mastering OpenCV and PCL with C++</li><li>- a research experience in 3D vision, particularly 3D reconstruction and 3D motion.</li></ul> <p><b>Host Laboratory:</b> FEMTO-ST Institute / AS2M Department (Besançon) <b>Starting date:</b> 2017-11-02</p>



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<b>Application</b>	<p>Please send the following documents (all in one PDF file) by e-mail to <b>sophie.aupet@ubfc.fr</b>:</p> <ol style="list-style-type: none"><li>1) For EU candidates: Copy of your national ID card or of your passport page where your photo is printed.</li></ol> <p>For non-EU candidates: Copy of your passport page where your photo is printed.</p> <ol style="list-style-type: none"><li>2) Curriculum Vitae (1 page) including hyperlinks to your ResearchID, Research Gate Google Scholar accounts.</li><li>3) Detailed list of publications including hyperlinks to DOI of each publication.</li><li>4) Letter of motivation relatively to the position (Cover Letter) in which applicants describe themselves and their contributions to previous research projects (maximum 2 pages)</li><li>5) Copy of your PhD degree if already available.</li><li>6) Coordinates of reference persons (maximum 3, at least your master thesis supervisor): Title, Name, organization, e-mail.</li></ol>
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