**Post-Doctoral / Research Engineer Position (M/F)**
*(Reference: RS_JLD_ING_UAV_May2018)*

<table>
<thead>
<tr>
<th>Research topics</th>
<th>Computer vision for small Unmanned Aerial Vehicles</th>
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</thead>
<tbody>
<tr>
<td>Department</td>
<td>Digital Security</td>
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<tr>
<td>Parution date</td>
<td>22/05/2018</td>
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<tr>
<td>Start date</td>
<td>ASAP</td>
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<tr>
<td>Duration</td>
<td>Fixed Term Contract [12 months]</td>
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</tbody>
</table>

**Description**

The main objective of this work is to design image processing tools for autonomous navigation (both indoor and outdoor) of small Unmanned Aerial Vehicles. To avoid obstacles, to move safely from two pre-defined locations, to communicate with other UAVs, to go back to return to the starting point in case of unexpected difficulties, to identify/track objects are the main tasks attached to this work.

Within the context of this study, dual cameras (thermal & visible) will be used. Some works related to image quality improvement will be necessary.

The work will be carried out within the context of the French National project FUI COOPOL and the European project EIT Digital DRONE112.

**Requirements**

- Education Level / Degree: PhD. Thesis
- Field / specialty: Image Processing
- Technology: Neural networks
- Languages / systems: PC Windows, OpenCV, Matlab.

**Application**

The application must include (I, II and III):

- I-Curriculum Vitae
- II-Motivation letter
- III-Names and addresses of two references

Applications should be submitted by e-mail to secretariat@eurecom.fr with the reference: RS_JLD_ING_UAV_May2018
EURECOM is a French graduate school and a research center in digital sciences based in the international science park of Sophia Antipolis, which brings together renowned universities such as Télécom ParisTech, Aalto University (Helsinki), Politecnico di Torino, Technische Universität München (TUM), Norwegian University of Science and Technology (NTNU), Chalmers University (Sweden) and Czech Technical University in Prague (CTU). The Principality of Monaco is a new institutional member. The Institut Mines-Télécom is EURECOM’s founding member.

EURECOM benefits from a strong interaction with the industry through its specific administrative structure: Economic Interest Group (kind of consortium), which brings together international companies such as: Orange, BMW Group Research & Technology, Symantec, Monaco Telecom, SAP, IABG.

EURECOM deploys its expertise around three major fields: Digital Security, Data Science and Communication Systems. EURECOM is particularly active in research in its areas of excellence while also training a large number of doctoral candidates. Its contractual research is recognized across Europe and contributes largely to its budget.

Thanks to its strong ties set up with the industry, EURECOM was awarded the “Institut Carnot” label jointly with the Institut Telecom right from 2006. The Carnot Label was designed to develop and professionalize cooperative research. It encourages the realization of research projects in public research centers that work together with socioeconomic actors, especially companies.

EURECOM specifically encourages women to apply with a view towards increasing the proportion of female researchers.