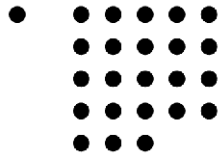


## Open position for a PhD-Student in Computational Intelligence at CUAS (Cologne University of Applied Sciences)

<b>Institute</b>	<a href="#">Institute for Informatics</a> <a href="#">Cologne University of Applied Sciences (CUAS)</a> <a href="#">Campus Gummersbach</a> Steinmülleralle 1 51643 Gummersbach 
<b>Project</b>	<b>SOMA</b> (Systematic Optimization for Modeling in IT & Automation): This BMBF-funded project aims at developing better forecasting and classification models for IT and engineering applications. Specific application areas are water management (forecasting, optimization), business intelligence modeling and gesture recognition (human-computer interfaces, games) ( <a href="#">more...</a> )
<b>Open position</b>	Scientific staff member in the 3-year project SOMA with the opportunity to do a PhD (in collaboration with one of our partner universities). We offer a lively applied science environment with strong interdisciplinary and international links. Responsibilities include project work and research, publication of research results, supervision of student projects and contribution to research proposals. Salary will be according to TV-L E13 (full-time).
<b>Time</b>	01.06.2009 – 31.05.2012
<b>Requirements</b>	Education (Diploma or Master) in informatics, engineering or any related field. Good working knowlegde in at least one of the following areas: <b>pattern recognition, learning, data mining, computational intelligence (i.e. neural nets, evolutionary algorithms), design of experiments (DOE)</b> . You have good analytical / mathematical skills. You are able to work well in a team and willing to participate in the coordination and supervision of students in bachelor / master projects and case studies. You can communicate within the team both in English and German language. Good skills in software development and programming, e.g. in MATLAB, R or Java.
<b>Inquiries</b>	Informal inquiries can be addressed to <a href="#">Prof. Dr. Wolfgang Konen</a> .
<b>Application</b>	<a href="#">Complete applications</a> should be sent to <a href="#">Prof. Dr. Wolfgang Konen</a> at the address given above, code <b>SOMA200901</b> . Please send only copies and not original documents, since the applications will not be sent back.

Complete applications should ideally include the following items:

- statement of research interests (What are your scientific interests? Why are you interested in this position?)
- detailed CV (date of birth, academic education, professional experience, skills, etc.)
- certificates of university degrees (Bachelor, Diploma/Masters, showing the scores)
- list of publications (if you have no publications yet, please indicate so)
- names and addresses of two professional referees, if possible.

You may also send applications via email, but please make sure they are complete and in a convenient format, such as one (or at most two) attached pdf file.

## SOMA – short project description

<b>Institute</b>	<a href="#">Institute for Informatics</a> <a href="#">Cologne University of Applied Sciences (CUAS)</a> <a href="#">Campus Gummersbach</a> Steinmülleralle 1 51643 Gummersbach
<b>Research group</b>	<p>CUAS has in the area of automation &amp; IT a well established research focus <a href="#">COSA (Computational Services in Automation)</a> with five principal researchers and numerous research and industry projects (<a href="#">more...</a>).</p> <p>The competence focus <a href="#">CIOP</a> (as part of COSA) bundles our research activities in computational intelligence (<a href="#">more</a>, sorry in German only). A second research project FIWA (forecasting in finance and water management), starting at the same time as SOMA and led by <a href="#">Prof. Dr. T. Bartz-Beielstein</a>, will help to create an interesting research surrounding in our group.</p>
<b>Project</b>	<b>SOMA</b> (Systematic Optimization for Modeling in IT & Automation): BMBF-funded project, 3 years.
<b>Project leader</b>	<a href="#">Prof. Dr. Wolfgang Konen</a>
<b>Time</b>	01.06.2009 – 31.05.2012
<b>Aims</b>	<p><b>SOMA</b> aims at developing:</p> <ul style="list-style-type: none"> <li>• improved forecasting and classification models for IT and engineering applications,</li> <li>• new techniques: automated meta-modeling (e.g. sequential parameter optimization, SPO) and automated feature generation and selection (e.g. slow feature analysis, SFA),</li> <li>• better dissemination through good case studies from SME (small &amp; medium-sized enterprises) in IT &amp; automation (“make advanced modeling techniques easy to use!”)</li> </ul>
<b>Application areas</b>	<p>Close collaboration with local companies, preferably small &amp; medium sized enterprises (SME), will guide the research process and validate the results, specifically in the following areas:</p> <ul style="list-style-type: none"> <li>• water management (forecasting, simulation, optimization),</li> <li>• business intelligence modeling,</li> <li>• gesture recognition (human-computer interfaces, games industries)</li> </ul>
<b>Scientific areas</b>	Applied informatics, modeling, simulation, visualization, neuroinformatics, learning and computational intelligence (evolutionary algorithms, neural networks), Data Mining