

TNO Defence, Security and Safety provides innovative solutions to promote general public safety and is the Ministry of Defence's strategic partner.

### TNO Modelling, Simulation and Gaming

The Modelling, Simulation and Gaming department employs innovations on synthetic environments, distributed simulation architectures, computer generated forces and development methodologies. Examples are the modelling of pilot behaviour in the Joint Strike Fighter (JSF) and the 3D visualisation of the mission area in Afghanistan.

One area of expertise is Behaviour Modelling, which involves architectures and technologies for representing characters and character interactions in serious games and simulations.

### The assignment

Many current serious gaming and simulation environments are relatively 'empty'; besides the actual players, the simulation is not populated. And even if a simulation is populated, characters often show behavior that is not very realistic. To increase the level of realism of simulation environments, and hence increasing the value of the training/simulation, TNO is developing a framework for populating such environments with relevant characters that show natural behavior. This framework integrates various state-of-the-art tools like Kynapse, VBS2 / Armed Assault using standardized interfaces such as TNO's TacBot.



You will be working on enhancements and extensions to our framework for populating simulation environments. More specifically, you will be extending the TacBot interface to incorporate new concepts, i.e. certain types of behaviour, e.g. bystanders, commuters, protesters, or behaviour aspects, e.g. fatigue, fear, anger. You will be implementing this in software using the available state-of-the-art tools.

### Interested?

TNO provides suitable work placement compensation. If you are interested in this assignment please contact:

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