

Job description

Applied research engineer in static analysis

Job description:

EADS IW is looking for an applied researcher in the field of static analysis.

The job's first mission is to design, implement and experiment static analysis tools for realistic software. A good theoretical background (in any of the fields: static analysis, compilation, abstract interpretation, type systems and/or model checking) is required in order to understand and implement formal descriptions of static analysis algorithms. The ability to maintain complex code and write clean code in OCaml is also a must. Additionally, experiments will be run to validate and incrementally improve the algorithms. Thus the major challenge of this job is to be able to bridge the gap between theory and practice.

On the longer term, the job will develop either to more research on prototypes for software engineering or in the transfer of such tools to EADS units.

Required skills:

Autonomous, rigorous, open-minded, taste for mathematics, hard-working, patient.

Required competencies and work experience:

Good writing skills

Excellent OCaml programmer

Good knowledge of the C programming language

Previous experience in some of the fields: static analysis, compilation, formal methods, formal verification, abstract interpretation, type system, model checking and/or programming language semantics. This experience could take the form of a master thesis, phd thesis, previous employment in a research lab or a software tool company.