

Thales Netherlands

Internships Huizen

Internship Opening

Site:	Huizen, NL
Reference.:	2011.1.026
Division/Dept:	Land Defence & C4I - Innovation, Research & Technology
Discipline:	Electrical Engineering/Computer Science
Level:	MSc. Thesis assignment
Background:	<p>Thales Defence & Security C4I Systems is part of Thales Nederland and member of the international Thales Group. Thales is a global technology leader for the Aerospace, Space, Defence, Security and Transportation markets and has approximately 68,000 employees in 50 countries. With its 25,000 engineers and researchers, Thales has a unique capability to design, develop and deploy equipment, systems and services that meet the most complex security requirements.</p> <p>Thales develops and manufactures high quality integrated communication systems for both commercial organisations and defence and has approximately 330 employees including 150 engineers working in Research and Development. The Innovation, Research & Technology department offers many opportunities for internships in the area of communication systems, navigation systems (Inertial/GPS), video and audio processing, and energy optimization. Applications for internships in these and related fields are welcomed.</p>
Title:	Real-time application performance in mobile (ad-hoc) networking nodes (Simulation study)
Assignment:	<p>Vehicle communication systems have shifted from in-vehicle intercom systems towards IP-based multi-media networking nodes that connect a number of vehicles to exchange information. Initially, analog radios (networks) were used to deliver inter-vehicle voice services. Contemporary systems, however, rely on IP-based networks to transport voice and data services in a network topology that may change over time; vehicles may join or leave the network without any fixed infrastructure and the link quality may vary over time. These dynamics pose many challenges to the in-vehicle networking nodes with regard to routing, discovery, self-configuration and Quality of Service.</p> <p>The goal of this assignment is to (1) create a network simulation model (in OPNET Modeler) of the in-vehicle networking node, and (2) to evaluate the performance of a set of real-time applications (most notably VoIP-related) in a network consisting of several mobile networking nodes.</p>
Affinity:	Programming in C/C++, Simulation, Communication Networks, (OPNET if possible)
	More info: maurits.degraaf@nl.thalesgroup.com