Research Projects in Software Science

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Software Science

- Ensuring that software is correct and secure is both a major scientific challenge and an enterprise with enormous societal relevance.

- Modelling is an essential part of many scientific and engineering disciplines.

- It is important (and inspiring!) to cover the full spectrum from theory to applications in a single group.
Bachelor Thesis in Software Science

Emphasis can be on programming, theory, algorithm design, literature study, empirical/experimental work, building prototypes, industrial applications,..

You can do your bachelor thesis within the group, at a company, or at some other university of research institute AoE.

How to find a good project:
1. Select a topic from our wiki http://www.sws.cs.ru.nl/Teaching (more than 100 project ideas listed!!)
2. Or propose your own topic
3. Discuss your ideas with staff members
Software Analysis / Dependability

Model learning

Testing

Verified and dependable AI and machine learning

Algorithms for system dependability
Program Verification

Robbert Krebbers

Program verification with types and logic

Freek Wiedijk
Software Technology

HPC, compilers, array programming

Bodo Scholz

Task oriented / functional programming

Pieter Koopman

Peter Achten

Programming education

Sjaak Smetsers
Software Engineering

Software development bots

Software product lines

Software refactoring
Theory of Software

Type theory and lambda calculus

Herman Geuvers

Automata theory

Jurriaan Rot

Term rewriting

Cynthia Kop
Our Industrial Partners

• ASML
• Philips Healthcare
• Canon Production Printing
• Nexperia
• Alfalval
• Rolsch
• TomTom
• Thermo Fischer
• Vanderlande
• SpronQ

• ADLink
• AKKA
• Axini
• ICT
• InTraffic
• Nederlandse Spoorwegen
• Malvern Panalytical
• Sogeti
• Thales
• TOPIC Embedded Systems
• TOP Software Technology
• ...
Our Academic Network

We will be happy to help you to arrange an internship at any place on earth where serious software science research is being carried out!