Fraunhofer IIS

# Offers for a 3-Months Internship for Bachelor Students

## Topic 3:
## VHDL Simulation Setup Generator

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**Abstract:**
For the simulation of code written in VHSIC hardware description language (VHDL), it is necessary to create a so called test-bench file and other associated files fitting to the file that shall be tested. This is a repetitive task which relies often on copying and adaption of old test-bench files.
Within the internship a PERL script shall be written and tested that automatizes this manual task as far as reasonable.

**Tasks:**

- Design of the Simulation Setup Generator capabilities
- Implementation and test of the Simulation Setup Generator

**Requirements:**

- Good knowledge of PERL
- Basic knowledge of VHDL (or Verilog)

**Payment Conditions & Application:**
Fraunhofer IIS will pay an appropriate allowance to cover living costs and will also provide for accommodation and medical insurance during your stay in Erlangen. Travel expenses will not be reimbursed.

If you are interested in the afore-mentioned topic please send your formal application including CV, a copy of your *valid* passport or ID card, motivation letter, latest grades report and the date of your earliest possible start to:

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**About the Fraunhofer IIS department "Communications":**
Research in the field of communication technologies is focused on innovative developments for satellite, terrestrial and combined (hybrid) broadcasting networks such as satellite-based direct-to-the-home broadcasting to fixed receivers or mobile satellite broadcasting systems as implemented in the USA (S-DARS).

The Communications Department specializes in system design, definition, analysis and validation. In addition we do research in waveform design, the implementation of hard- and software as well as real-time prototypes and in the development of first-class professional DRM test and measurement systems.

Furthermore, future research is required in the design of complementary terrestrial transmission systems, for instance the digitalization of FM broadcasting or the integration of existing terrestrial systems such as Digital Video Broadcasting Handheld DVB-H or Digital Multimedia Broadcasting DMB.

For further information please visit our website: www.iis.fraunhofer.de