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Lab/Semester Thesis

## Code formatting for TinyOS in Eclipse

Wireless sensor networks are a valuable tool to gain a digital representation of the physical world. Many nodes utilize the operating system *TinyOS* and the programming-language *NesC* which is part of *TinyOS*. *NesC* itself is a modified version of *C*.

The TinyOS Eclipse Plugin *Yeti 2* developed in our group is a step toward easier development of applications. It provides developers with syntax highlighting, error- and warning messages.

Developers often follow some code formatting rules, for example “there has to be a space character after an opening bracket”. To ensure the formatting rules are always applied, code formatting tools are used. These tools can modify the source code such that the formatting rules are fulfilled.

The goal of this thesis is to add code formatting capabilities for *NesC* to *Eclipse*. This may include some analysis of the source code and a user interface where the user can specify which formatting rules to use.



### Required Skills

You should have some skills in software development and you should be familiar with the *Java* programming language. Knowledge about *Eclipse*, *TinyOS* and *NesC* can help, but is not required. Knowledge about parser design can be an advantage.

Are you interested? Please contact us by email or phone.

### Advisors

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