

# **The Effect of Program Visualization on the Attention-Directing Characteristics of the Learner**

by Gil Ebel

December 2006

## **Abstract of master thesis**

Developers of program visualization (PV) systems generally claim positive affective effects of PV usage such as increased motivation. This work attempts to characterize and measure these effects. The methodology is based on video analysis of classroom activity for behavior patterns that are associated with uncooperative attitude and attention loss. These patterns are correlated with the different learning and teaching activities that occur. The results show a near-total reduction in "bad" behavior while using PV, supporting the positive affective effects claimed for PV.