Povzetek vsebine

Vizualizacija je že od začetkov matematike pravzaprav glavna opora njenega razvoja. Kar je novo je to, da napredek računalnikov in računalniške grafike ponuja nova sredstva in načine zanjo. Računalniško podprta vizualizacija je postala raziskovalno orodje, ki ga uporablja vse več področij znanosti. Eno od teh področij je tudi matematika. Vizualizacija je najbolj povezana s pojmi kot so dojemanje in razumevanje zapletenih matematičnih struktur in njihovih lastnosti. To pa sta hkrati glavna cilja izobraževanja.

Poleg samega opisovanja vidikov uporabe računalniške vizualizacije v matematiki v svojem diplomskem delu opisujem tudi možnosti uporabe večpredstavnih tehnologij za množično uporabo, kot je internet s svojimi tehnologijami, za vizualizacijo. Te predstavljajo pravzaprav idealno podlago za uporabo teh novih sredstev in načinov poučevanja.

Abstract

Since the beginning of mathematics, visualization has been actually the leading force for its development. The difference now is, that recent progress of computers and computer graphics brings new media and new ways for applying it. Computer-aided visualization has became a research tool which is used more and more in science related fields. One of them is also mathematics.
Visualization brings faster learning and insight of complex mathematical structures and its properties. And those two things are major goals of education.

Beside that, I also discuss possibilities of using mass multimedia technologies, like internet, for computer visualization. Internet with its multimedia technologies represents ideal platform for implementation of those new ways of education.

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