graduation – emese aros 18/7/08

Dear Emese

First of all, I must apologize that I cannot be present at your graduation ceremony. When you receive your diploma, I am on holiday, on my way to the country where you will soon return, Hungary.

Many people, no doubt, know that Hungary has many great mathematicians. You, although from the perspective of a computer scientist, follow them in that tradition, by your work which aims at **bringing mathematics closer to the intuition of high school students**, using the 3D Virtual Reality Modeling Lamguage. By creating interactive images of common mathematical principles, such as for example expressed in the infamous equation: $(a+b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$, you enable high school students, and teachers, to bridge the gap between **algebraic abstractions** and **spatial understanding**.

In the process of working on your thesis, I was pleasently surprised by the **enthusiasm** and **perseverence** with which you tackled the task you set upon yourself, that is **bridging the gap** between **mathematics** and **computer science**, by creating a tool for learning an teaching mathematics, using modern **multimedia technology**.

Both **dr. Zsofi Ruttkay**, from the University Twente, and I are very pleased with the result, which consists of an interesting thesis as well as an online tool with many examples from the Hungarian mathematics curriculum. The tool and examples, moreover, ate not only adequate from a mathematical perspective, but are equally pleasing for the eye. In another course that you followed, **visual design**, I already observed you talent for graphical finesse and delicate drawings.

Before I virtually continue my holiday, I want to thank you for our pleasant cooperation, congratulate you with the result, and wish you success in your further career, in which no doubt mathematics will play a **prominent role**.

Anton Eliëns