AsirPad – a computer algebra system with handwriting interface on PDA

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Abstract

Infty Editor [1, 2] is a editor with on-line recognition of handwritten mathematical expressions, which was developed by our research group. We ported the handwriting interface of InftyEditor to Linux PDA Zaurus. OpenXM(Open message eXchange for Mathematics) is an infrastructure for mathematical communication. We added OpenXM translator and communication controller to this interface, so that one can carry out calculations for mathematical expressions inputted by handwriting. As a result, we developed a computer algebra system *AsirPad* with handwriting interface on PDA(See demo movie [3]). Furthermore, we gave a lecture about RSA cryptography at a junior high school using AsirPad. In our talk, we will explain the details of AsirPad, and report the results of the lecture.

References

[1] M. Fujimoto, T. Kanahori and M. Suzuki: Infty Editor – A Mathematics Typesetting Tool with a Handwriting Interface and a Graphical Front-End to OpenXM Servers, RIMS Kokyuroku vol.1335, Computer Algebra – Algorithms, Implementations and Applications, (2003) 217–226.

[2] T. Kanahori, M. Fujimoto and M. Suzuki: Authoring Tool for Mathematical Documents – Infty –, Proceedings of the Workshop on Mathematical User Interfaces, online, (2004) 9 pages, `http://www.activemath.org/%7Epaul/MathUI/proceedings/`

[3] Infty Project Web Site: `http://www.inftyproject.org/`