Neil Soiffer Is an ideal candidate to receive the Dr. Jacob Bolotin award for his contributions to the blind community by providing the technologies to access mathematical and scientific information. Not since Dr. Abraham Nemeth, have we seen an individual give so much to empower blind people to access mathematical and STEM information.

Neil Soiffer’s most recent contribution is the open source MathCAT: Math Capable Assistive Technology, (https://nsoiffer.github.io/MathCAT/).

This is a library of software and tools supporting speech and braille output for a wide range of applications. One implementation is an add-in for NVDA, which provides the most accurate and flexible spoken and refreshable braille presentation of mathematics the world has ever known. Mic Curran, founder of NVDA said that they have plans to add MathCAT to the core of their outstanding screen reader. In addition, I have learned that the team working on Jaws also plan to add MathCAT as their primary mechanism for accessing mathematics on web pages and in eBooks. In addition, Neil has added Chemistry to the capabilities of MathCAT. Through his participation on the “Chemistry on the Web and in Publishing “community group he has added to MathCAT the correct pronunciation and braille formatting to both BANA and UEB. There are also plans by the DAISY Consortium to use the libraries from MathCAT to drive mathematical and chemical formatting in Liblouis. But that is not all that we can thank Neil for.

Neil has been working on standards for math for as long as I can remember. Neil has participated in the W3C working groups for many years and is currently the chair; it is wonderful to find a person who is so knowledgeable about the requirements of the blind as the standards are developed. We all have a lot to thank Neil for regarding the standards that support spoken and refreshable braille output. He is also the chair of MathML in DAISY working group and participates in the NIMAS 3 working group. It is amazing that such an expert makes himself available to participate in this wide range of activities.

Neil’s early contributions was when he was with Design Science. He worked on MathPlayer, a plug-in for Internet Explorer to display MathML. He was able to create speech rules for the spoken presentation of MathML to make MathPlayer accessible. He developed the speech rules, which he has honed over many years to make the presentation of math more natural. He was fortunate to work with Dr. Nemeth to make mathematical presentations more comprehensible.

Knowledge of mathematics is essential for all students and engineers in the STEM fields. Neil Soiffer’s contributions to the advancements in the navigation of complex mathematical expressions and the flexibility and precision of the spoken output is unquestionable. Finally, he has enthusiastically learned the braille rules and incorporated this knowledge into the tools he has developed.

I am delighted to nominate Neil Soiffer for the Dr. Jacob Bolotin award!

George Kerscher