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Some properties of Fibonacci-sigmoid numbers and polynomials matrix

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Abstract. In this paper, we introduce the Fibonacci-sigmoid polynomials $S_{n,F}(x)$ and the Fibonacci-sigmoid matrix $\mathcal{S}_{n,F}(x, F)$. Also, examples of the inverse of the Fibonacci-sigmoid matrix are presented. We factorize the following matrix by the Fibonacci matrix.

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