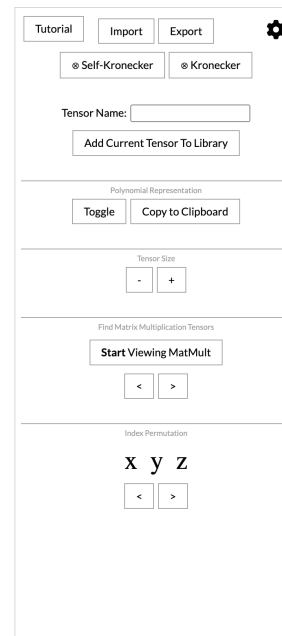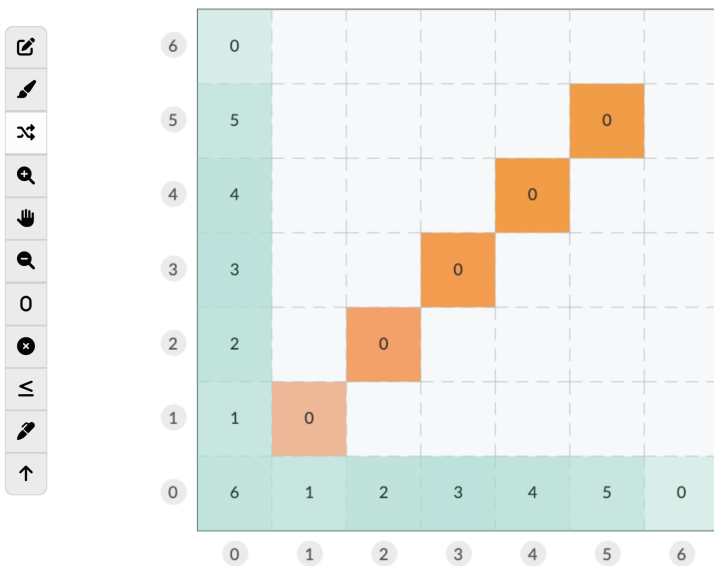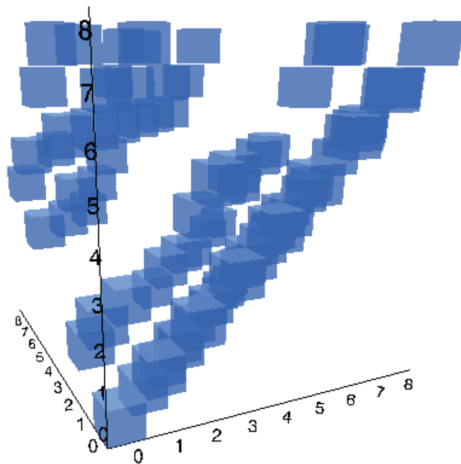# TensorShop
tensorshop.github.io

Josh Alman & Jonah Stockwell   Dept. of CS at Columbia University

An intuitive, entirely web-based tool for visualizing, manipulating, and analyzing tensors for matrix multiplication algorithm design.

| Tutorial | Import | Export | ⚙ |

⊗ Self-Kronecker   ⊗ Kronecker

Tensor Name: [   ]

Add Current Tensor To Library

Polynomial Representation

| Toggle | Copy to Clipboard |

Tensor Size

| - | + |

Find Matrix Multiplication Tensors

Start Viewing MatMult

| < | > |

Index Permutation

x y z

| < | > |

A suite of tools for

importing and building tensors

exporting two- and three-dimensional representations

exporting tensors for analysis

manipulating tensor axes

permuting indices

zooming in and out on tensors

finding matrix multiplication subtensors

partitioning tensors

zeroing out / combinatorial degeneration

monomial degeneration by labels

solving monomial degeneration by linear programming

Kronecker products

and more!