# MATTHEW J. KUKLA

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https://mkukla.net <> https://github.com/matt-kukla

#### **EDUCATION**

University of Maryland

May 2022

Mathematics, BSc.

College Park, MD, USA

#### WORK EXPERIENCE

The Math Citadel

Spring 2019 - present

Researcher

- · Conducted research in fuzzy set theory and network theory
- · Developed numerous software packages
- · Contributed to technical articles
- · Addressed website security issues

**Patton Electronics** 

Summer 2016

Software Engineering Intern

Gaithersburg, MD, USA

- · Developed a Linux-based operating system for VDSL router prototype
  - Wrote and patched hardware-specific kernel modules
  - Tested kernel builds
  - Organized and documented existing codebase

#### **SKILLS**

Languages C, OCaml, Python, Java, MATLAB, Shell, Haskell, Fortran Linux, UNIX (\*BSD and Solaris), MS-DOS, Microsoft Windows

Web HTML, CSS, Apache, Gopher Tools LATEX, Git, NEC2, SQL

#### RESEARCH AND PUBLICATIONS

# Logical Limit Laws for Layered Permutations and Related Structures

Authors: Samuel Braunfeld, Matthew Kukla (2021) Published, Enumerative Combinatorics and Applications.

#### Colored Convex Linear Orders and Logical Limit Laws

Authors: Matthew Kukla (2021)

Preprint.

### Rings of Typed Ordered Fuzzy Numbers

Authors: Matthew Kukla, Rachel Traylor (2020)

Preprint, arXiv:2010.07764.

## TALKS AND PRESENTATIONS

# Logical Limit Laws for Layered Permutations and Related Structures

University of Maryland Logic Seminar (2022)

## Categorical Mirror Symmetry of Elliptic Curves (two lecture series)

University of Maryland Geometry and Physics Seminar (2018)

## Generalized Calabi-Yau Manifolds

University of Maryland Geometry and Physics Seminar (2018)

#### **CONFERENCES**

# University of Maryland Geometry Festival

University of Maryland (May 2019)

# Witt Vectors, Deformations, and Absolute Geometry

University of Vermont (June 2018)