

MATTHEW J. KUKLA

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EDUCATION

University of Maryland
Mathematics, BSc.

Expected 2022

WORK EXPERIENCE

The Math Citadel
Researcher

Spring 2019-Present

- Conducted research in fuzzy set theory and network theory
- Developed numerous software packages
- Contributed to several technical articles

Patton Electronics
Software Engineering Intern

Summer 2016
Gaithersburg, MD, USA

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

SKILLS

Programming Languages
Operating Systems

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

PUBLICATIONS

Logical Limit Laws for Layered Permutations and Related Structures
Authors: Samuel Braufeld, Matthew Kukla (2021)
Published, Enumerative Combinatorics and Applications

Rings of Typed Ordered Fuzzy Numbers
Authors: Matthew Kukla, Rachel Traylor (2020)
Preprint, arXiv:2010.07764

TALKS AND PRESENTATIONS

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)