

JULIAN ROSEN

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TECHNICAL SKILLS

· Python (Pandas, Scikit-learn, Keras, Xgboost, Statsmodels, SciPy) · C/C++ · Octave
· Jupyter · Git · GNU/Linux systems · Docker · LaTeX · SageMath

PROFESSIONAL EXPERIENCE

University of Maine, Department of Mathematics & Statistics
Assistant Professor (Fixed Term) 2018 – Present

University of Michigan, Department of Mathematics
Lecturer, mathematics and statistics 2018
Visiting Scholar 2017
Lecturer, mathematics 2016

University of Georgia, Department of Mathematics
Assistant Professor, Limited-Term 2015 – 2016

University of Waterloo, Department of Pure Mathematics
Postdoctoral Fellow 2013 – 2015

SELECTED PROJECTS

[Dynamical Imaging with Interferometry](#)

Designed an algorithm to generate dynamical images (“movies”) from interferometric data collected by an array of radio telescopes, to be used for imaging the black hole Sgr A*

[MHS mathematics computation software](#)

Designed and implemented an algorithm for finding and symbolically proving combinatorial identities in number theory

[COVID-19 Hospitalization Forecaster](#)

Designed a machine learning tool to predict how many hospital beds will be filled by COVID-19 patients at a future date. Includes website and API. Fall 2021 Erdős Institute top project finalist

[Mudpi](#)

Wrote a multiplayer online text adventure game that is accessed through a web browser, and set up a virtual private server to run it. Written in C

EDUCATION

University of Michigan Ph.D. Pure Mathematics 2013
Dissertation: [The Arithmetic of Multiple Harmonic Sums](#) (Advisor: Jeffrey Lagarias)

University of Oklahoma B.S. Mathematics (with Distinction) 2007
Samuel Watson Reaves Award (Outstanding Senior Math Major)
Nathan A. Court Award (Outstanding Freshman or Sophomore Math Major)
MAA Putnam Examination Award: Top Score in AR/OK region (National Math Competition)
National Merit Scholar