

# JULIAN ROSEN

[julianrosen@gmail.com](mailto:julianrosen@gmail.com) · <https://julianrosen.net/>

## TECHNICAL SKILLS

---

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

## PROFESSIONAL EXPERIENCE

---

<b>Upstart</b> , Machine Learning team <i>Research Scientist</i>	2022 – present
<b>University of Maine</b> , Department of Mathematics & Statistics <i>Assistant Professor (Fixed Term)</i>	2018 – 2021
<b>University of Michigan</b> , Department of Mathematics <i>Lecturer</i> , mathematics and statistics	2018
<i>Visiting Scholar</i>	2017
<i>Lecturer</i> , mathematics	2016
<b>University of Georgia</b> , Department of Mathematics <i>Assistant Professor, Limited-Term</i>	2015 – 2016
<b>University of Waterloo</b> , Department of Pure Mathematics <i>Postdoctoral Fellow</i>	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

---

<b>University of Michigan</b> Ph.D. Pure Mathematics Dissertation: <a href="#">The Arithmetic of Multiple Harmonic Sums</a> (Advisor: Jeffrey Lagarias)	2013
<b>University of Oklahoma</b> B.S. Mathematics (with Distinction) 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	2007