

# EDWARD VARVAK

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✉ evarvak@gmail.com

## EDUCATION

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### University of Illinois at Chicago

*Doctor of Philosophy (Ph.D.) in Mathematics*

*Master of Science (M.S.) in Mathematics*

*Sept 2022 - May 2027*

*Expected 2024*

### State University of New York, Stony Brook

*Bachelor of Science (B.S.) in Mathematics*

*Bachelor of Science (B.S.) in Applied Mathematics and Statistics*

*Sept 2018 - May 2022*

## RESEARCH EXPERIENCE

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### Honors Thesis in Algebraic Geometry, Stony Brook

- Looked into bitangent lines of irreducible plane curves
- Investigated the monodromy of flexes of irreducible plane curves
- Wrote a thesis “Recovering Plane Nodal Curves from their Bitangents”

*Aug 2021 - May 2022*

## PROFESSIONAL EXPERIENCE

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### Data Science Internship, PTC

*Innovation Intern*

- Investigated object detection via computer vision
- Researched algorithms for dimensionality reduction of large feature data
- Helped develop an algorithm for detecting the cycle time of a periodic video feed

*Summer 2021*

### Machine Learning Internship, CIMCON Lighting

*Machine Learning Intern*

- Researched deep learning computer vision neural networks
- Developed an algorithm to detect and locate guns from a live video feed

*Summer 2019*

## HONORS AND AWARDS

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Honors in Mathematics, SBU Mathematics Department

Kuga-Sah Award, SBU Mathematics Department

Cum Laude, Stony Brook University

*2018-2022*

*2022*

*2022*

## LANGUAGES

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English (Native)

Russian (Fluent in speaking and reading; proficient in writing)

## SKILLS

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LaTeX, Mathematica, Python, C++, R

## REFERENCES

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**Olivier Martin**, James H. Simons Instructor,  
Stony Brook University,  
[olivier.martin@stonybrook.edu](mailto:olivier.martin@stonybrook.edu)

**Radu Laza**, Professor of Mathematics,  
Stony Brook University,  
[radu.laza@stonybrook.edu](mailto:radu.laza@stonybrook.edu)