

# Srikar Varadaraj

## Resume

### Contact Information

Columbia University, New York, NY 10027

sv2423@columbia.edu

### Academic Interests

Algorithms, Machine Learning, Combinatorics, Game Theory, Complexity

### Education

**Columbia University, New York, NY**

Bachelor of Arts in Mathematics and Computer Science (2013-2017)

Masters in Theoretical Computer Science (2017-2018)

### Experience

- Research Internship Program at Columbia University **Summer, 2017**  
*Modeling and Simulation of User Generated Content Dynamics*
- Software Engineer (Intern) at Google, New York, NY **Summer, 2016**  
*Used Natural Language Processing tools to improve query understanding and search result quality for the Zagat app, which allows users to find restaurants and the best places to eat.*
- REU (Research Experience for Undergraduates) at Columbia University **Summer, 2015**  
*Investigated Hurwitz Numbers, an analogue of Bernoulli Numbers. Found surprising patterns, new properties and connections to the zeros of  $p$ -adic  $L$  functions.*
- REU (Research Experience for Undergraduates) at Columbia University **Summer, 2014**  
*A project in Algebraic Topology. Generalized results of Clay and Watson for large classes of  $L$ -space twisted torus knots.*

### Publications and Presentations

- **Non-left-orderable surgeries on twisted torus knots**  
Katherine Christianson, Justin Goluboff, Linus Hamann, **Srikar Varadaraj**  
Proc. Amer. Math. Soc. 144 (2016)  
Preprint: [arXiv:1410.1908](https://arxiv.org/abs/1410.1908)
- Short presentation at *ICM 2010* on certain developable surfaces (International Congress of Mathematicians)

### Teaching

- Math Tutor **Summer 2016-Present**  
• Taught students for the GRE, Modern Analysis I, Modern Algebra I, PDEs, Linear Algebra.
- Undergraduate Teaching Assistant **Fall 2014-Present**  
• Calculus I - V1101, Modern Algebra I - W4041, Analysis of Algorithms I - W4231  
• Discrete Mathematics - W3203, Analysis of Algorithms I (Summer Session)

### Honors and Awards

- John Dash Van Buren Mathematical Prize (2017)
- Professor Van Amringe Mathematical Prize (2016)
- William Lowell Putnam Competition - Top 200 (2014)
- I.I.Rabi Scholarship for scientific research (2013-2017)
- International Math Olympiad Training Camp (Top 15) - India (2012,2013)
- KVPY Research Fellowship (2012)
- Represented India at the International Olympiad in Linguistics (2011)
- International Junior Astronomy Olympiad Training Camp - India (2010)

### Activities and Interests

- Chess - FIDE (~2100), USCF (~2100). All-American Team - 2007, 2008. Invited to the World Youth Championships as member of team USA, Drew Anand in a simultaneous chess match at ICM (2010)
- Organizational Committee Member of Columbia Japanese Society - (Fall 2014 - Fall 2015)

### Programming

- C/C++, Java, Go, Python, LaTeX, Matlab