

**Justin “JD” Nir**  
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US Citizen

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## EDUCATION

**University of Nebraska-Lincoln**, Lincoln, NE

Ph.D. in Mathematics, May 2020 (anticipated)

MA in Mathematics, May 2017

Selected Coursework:

- Special Topics in Discrete Mathematics: Extremal Graphs and Hypergraphs
- Special Topics in Discrete Mathematics: Bijective Combinatorics
- Special Topics in Discrete Mathematics: Applications of the Probabilistic Method

**Carnegie Mellon University**, Pittsburgh, PA

Bachelor of Science in Computer Science, May 2013

Bachelor of Science in Discrete Math and Logic, May 2013

Selected Coursework:

- 15-451 Algorithm Design and Analysis
- 21-701 Graduate Topics in Discrete Mathematics

## SKILLS

**Software:** git, vim, gdb, SQL, Apache, L<sup>A</sup>T<sub>E</sub>X, BurpSuite, Wireshark

**Languages:** Python, Ruby, C, Javascript, PHP, Java, Go, C++, Basic, x86 Assembly

## EXPERIENCE

**University of Nebraska-Lincoln Math Department**, Lincoln, NE

*Teaching Assistant*, August 12, 2015 — present

- Instructor of record for algebra, trig. and single- and multivariable calculus courses
- Lead lecture-based and active learning classrooms

**MIT Lincoln Laboratories**, Lincoln, MA

*Summer Intern*, May 2016 — August 2016

- Developed software for a secure database prototype.

**Fast Orientation**, Washington, D.C.

*Research Engineer*, January 12, 2015 — July 24, 2015

- Research, design and prototype product features
- Provide analysis for security evaluations

**Independent Security Evaluators**, Baltimore, MD

*Security Analyst*, July 1, 2013 — January 2, 2015

- Evaluate applications and document vulnerabilities
- Develop and present security-oriented training seminars

## INVITED TALKS

*The Chromatic Number of Random Lifts of Complete Graphs*

University of Colorado-Denver Discrete Mathematics Seminar, April 2019

*Turán-Type Questions about Cliques and Stars*

CombinaTexas 2019, College Station, TX, March 2019

*Industry-wide Misunderstandings of HTTPS*

International Conference on Information Security and Cryptology, Seoul, November 2013