

# John C. Kolesar

AKW 211, 51 Prospect Street, New Haven, CT 06511

☎ 301-503-5299 (cell) • ✉ jkolesar98@gmail.com, john.kolesar@yale.edu

## Education

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### Yale University

*Ph.D., Computer Science*

Advisor: Ruzica Piskac

Earned M.S. en route to Ph.D. in 2022

**New Haven, Connecticut**

*2020–2026 (anticipated)*

### Cornell University

*Bachelor of Arts with Distinction in All Subjects*

**Ithaca, New York**

*2016–2020*

Majors:

- Mathematics (Magna cum Laude, Computer Science concentration)
- Classics (Latin concentration)

Minors:

- Computer Science
- Philosophy

Cumulative Grade Point Average: 3.97

Computer Science GPA: 4.02

Honors.....

### Phi Beta Kappa

*Cornell University College of Arts & Sciences*

*2020*

### Arts & Sciences Dean's List

*Cornell University*

*All available semesters*

Graduate Course Work Performance.....

Grade of H (maximum grade for Yale GSAS) in all graduate courses

## Research Interests

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- Formal Methods
- Program Verification
- Symbolic Execution
- Automatic Program Repair
- Software-Defined Networking

## Publications

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- John C. Kolesar, Ruzica Piskac, William T. Hallahan. **Checking Equivalence in a Non-Strict Language.** *OOPSLA*, 2022 (To Appear).
- Jialu Zhang, De Li, John C. Kolesar, Hanyuan Shi, Ruzica Piskac. **Automated Feedback Generation for Competition-Level Code.** *ASE*, 2022 (To Appear).

## Industry Work Experience

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### Microsoft One Engineering System

*Research Intern, Remote*

*Summer 2022*

Supervisor: Josh Becker

Mentor: Grant Holliday

### Aretec Inc.

*Big Data Software Application Developer*

*Summer 2018, Summer 2019*

Contractor for U.S. Securities and Exchange Commission

New York City (2018)

Washington, D.C. (2019)

## Teaching Experience

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Graduate Teaching Fellow at Yale University.....

### CPSC 435/535: Building an Internet Router

*Taught by Robert Soule*

*Fall 2022*

### CPSC 433/533: Computer Networks

*Taught by Anurag Khandelwal*

*Spring 2022*

### CPSC 323: Introduction to Systems Programming and Computer Organization

*Taught by Ruzica Piskac and Rob Brunstad*

*Fall 2021*

Undergraduate Teaching Assistant at Cornell University.....

### CS 3110: Data Structures and Functional Programming

*Taught by Nate Foster*

*Spring 2020*

### CS 4820: Introduction to Analysis of Algorithms

*Taught by Eva Tardos*

*Fall 2019*

### CS 3110: Data Structures and Functional Programming

*Taught by Michael Clarkson*

*Fall 2018*

### CS 2112: Honors Object-Oriented Design and Data Structures

*Taught by Dexter Kozen*

*Fall 2017*

## Other Work, Research, and Volunteering Experience

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### Cornell University

**Ithaca, New York**

*Computer Science Research*

*Fall 2019, Spring 2020*

Research Advisor: Nate Foster

Subject: Software-Defined Networking with P4

### Tenley Achievement Program

**Washington, D.C.**

*Office Manager*

*Summer 2017*

### Yale University

**New Haven, Connecticut**

*Ph.D. Student Buddy for Admitted Student Day*

*Spring 2022*

## Skills

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- o Proficiency in Java, C, OCaml, Q, Haskell, Python
- o Experience with JavaScript, TypeScript, Coq, Standard ML, C++, C#, Kusto
- o Experience with Excel, LaTeX, Unity, Blender, VirtualBox, Docker