John C. Kolesar

AKW 211, 51 Prospect Street, New Haven, CT 06511
301-503-5299 (cell) • jkolesar98@gmail.com, john.kolesar@yale.edu

Education

Yale University — **New Haven, Connecticut**
Ph.D., Computer Science — *2020–2026 (anticipated)*
Advisor: Ruzica Piskac
Earned M.S. en route to Ph.D. in 2022

Cornell University — **Ithaca, New York**
Bachelor of Arts with Distinction in All Subjects — *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

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

Publications

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

Industry Work Experience

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

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

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

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