Jeremy Stratton-Smith

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Education

Aug 2025 – present	**Rochester Institute of Technology**, Rochester, NY *PhD in Computing and Information Sciences, advised by Arthur Azevedo de Amorim*
Sep 2024 – May 2025	**Rochester Institute of Technology**, Rochester, NY *Master of Science in Computer Science (coursework), GPA: 4.00/4.00*
Sep 2013 – May 2017	**Middlebury College**, Middlebury, VT *Bachelor of Arts in Mathematics, summa cum laude, GPA: 3.82/4.00*

Publications

· Jeremy Stratton-Smith and Arthur Azevedo de Amorim. *Beyond Reduction: Formalizing Undecidability Via Effective Inseparability*. In submission, CPP 2027.

· Elizabeth Noelle Blose, Biswash Ghimire, Noah Graham, and Jeremy Stratton-Smith. *Edge Corrections to Electromagnetic Casimir Energies from General-Purpose Mathieu-Function Routines*. Physical Review A 2015.

Research

Jun 2025 – present	**Rochester Institute of Technology, Department of Computer Science**, Rochester, NY *Graduate Research Assistant* · Mechanized undecidability proofs in Rocq via effective inseparability, establishing Σ_1^0-completeness of Kleene algebra with commutativity conditions, its universality problem, and regex unification. · Developed a Rocq framework for Kleene algebra and weaker variants like pre-Kleene algebra to study which theories remain decidable.
Jun – Aug 2014	**Middlebury College Department of Physics**, Middlebury, VT *Research Assistant* · Wrote Mathematica package for Mathieu functions of complex input and parameter, supervised by Dr. Noah Graham.

Talks

Aug 2026	**Upstate PL**, Buffalo, NY *Formalized Effective Inseparability & An Application*

Conferences & Workshops Attended

Jun 2026	**Oregon Programming Languages Summer School**, Eugene, OR
Oct 2025	**ICFP / SPLASH, including the Programming Languages Mentoring Workshop**, Singapore
Jun 2025	**Oregon Programming Languages Summer School**, Eugene, OR

Teaching & Work Experience

Jan 2025 – present
Rochester Institute of Technology, Computer Science Department, Rochester, NY
Graduate Teaching Assistant
· CSCI 344 Programming Language Concepts (Fall 2026)
· CSCI 142 Computer Science II (Spring 2025)

Dec 2021 – May 2026
Wolfram Research, Remote (Rochester, NY)
Wolfram|Alpha Lead Developer
· Implemented and maintained natural language processing and computational mathematics code for the Wolfram|Alpha family of products, supporting queries such as “does the sum of 1/(n^2+1) converge for n=1 to infinity”.
· Maintained development infrastructure including git repositories and developer utilities to ensure efficient workflows for my team.
· Reviewed pull requests for latency and code quality.
· Documented multiple frameworks my team interacted with.
· Worked across teams within the company to manage projects and support overarching business priorities.
· Developed training materials, including git tutorials, a code style guide and workflow management to improve team standards and efficacy.
· Helped set priorities for a team of 8, and hired, onboarded and mentored developers.

Dec 2018 – Dec 2021
Math Content Developer
· Built step-by-step solvers for arc lengths, areas between curves and convergence of infinite sums.
· Worked effectively and efficiently with remotely distributed team.

2019 – 2022
Wolfram Summer Research Program, Wolfram Research, Remote/Waltham, MA
Academic Director (Spring & Summer 2020); Mentor (Summers of 2019, 2022)
· Developed and led Intro to Wolfram Language curriculum for 44 students.
· Planned two weeks of lecture content on topics ranging from user interface design to image processing.
· Oversaw the selection and progress of independent projects throughout the online program.
· Aided in staff and student recruitment as well as overall planning of the program.

Skills

· **Formal Verification:** Rocq; interactive theorem proving, synthetic computability
· **Languages:** OCaml, Wolfram Language, Racket, SML, Python, Java, JavaScript

Volunteering

Fall 2025
Code to PhD
Mentor underrepresented students applying to computer science PhD programs

2022 – 2025
Third Presbyterian Church, Rochester, NY
Clerk of Session (2023–2025); More Light Committee Chair (2022)