

### Education

- 8/2020–present PhD student in Computer Science, *Augusta University*, Augusta, GA USA.
- 8/2014–5/2016 Master of Science in Computer Science, *Georgia Institute of Technology*, Atlanta, GA USA.
- 8/2011–5/2014 Bachelor of Science in Computer Science, *Augusta University*, Augusta, GA USA.

### Teaching Experience

- 2019–2021 CSCI 1301 - Principles of Computer Programming I, *Instructor*, Augusta University.  
Total enrollment 228, 6 semesters: fall 2019 – spring and fall 2020 – spring and summer and fall 2021.
- 2019 CSCI 1200 - Introduction to Computers and Programming, *Instructor*, Augusta University.  
Total enrollment 24, 2 semesters: spring and summer 2019.

### Publications

- 2023 Clément Aubert, Thomas Rubiano, Neea Rusch, and Thomas Seiller. “Distributing and Parallelizing Non-canonical Loops”. In: *Verification, Model Checking, and Abstract Interpretation*. Springer Nature Switzerland, 2023, pp. 1–24. DOI: 10.1007/978-3-031-24950-1\_1.
- 2022 Clément Aubert, Thomas Rubiano, Neea Rusch, and Thomas Seiller. “mwp-Analysis Improvement and Implementation: Realizing Implicit Computational Complexity”. In: *7th International Conference on Formal Structures for Computation and Deduction (FSCD 2022)*. Vol. 228. LIPIcs. Schloss Dagstuhl–Leibniz-Zentrum für Informatik, 2022, 26:1–26:23. DOI: 10.4230/LIPIcs.FSCD.2022.26.
- 2022 Neea Rusch. “Formally Verified Resource Bounds Through Implicit Computational Complexity”. In: *Companion Proceedings of the 2022 ACM SIGPLAN International Conference on Systems, Programming, Languages, and Applications: Software for Humanity*. SPLASH Companion 2022. ACM, 2022, pp. 17–20. DOI: 10.1145/3563768.3565545.

#### Software

- 2023 Clément Aubert, Thomas Rubiano, Neea Rusch, and Thomas Seiller. *pymwp: MWP analysis in Python*. Version 0.4.2. May 2023. DOI: 10.5281/zenodo.7908484.
- 2022 Clément Aubert, Thomas Rubiano, Neea Rusch, and Thomas Seiller. *Distributing and Parallelizing Non-canonical Loops – Artifact*. Version 1.0. Sept. 2022. DOI: 10.5281/zenodo.7080145.

### Talks & Presentations

- 2023-03-10 🌐 SCOT: A Seminar on Semantic and Formal Approaches to Complexity, *online*.
- 2023-01-21 🇺🇸 The Ninth International Workshop on Coq for Programming Languages (CoqPL 2023), *Boston, USA*.
- 2023-01-16 🇺🇸 The 24th International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI 2023), *Boston, USA*.
- 2022-12-06 🇳🇿 The SPLASH Doctoral Symposium (SPLASH 2022), *University of Auckland, New Zealand*.
- 2022-06-20 🇫🇷 The 28th International Conference on Types for Proofs and Programs (TYPES 2022), *University of Nantes, France*.
- 2022-04-01 🇺🇸 The 37th Annual Graduate Research Day – poster, *Augusta University, USA*.
- 2021-11-18 🇫🇷 Laboratoire d’Informatique de Paris Nord (LIPN) seminar, *Université Sorbonne Paris Nord, France*.
- 2021-11-15 🇫🇷 Inria Celtique research team seminar, *IRISA Rennes, France*.
- 2021-03-26 🌐 The 36th Annual Graduate Research Day, *online, Augusta University, USA*.

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## Academic Service

PC Member **Artifact Evaluation Committee (AEC).**

APLAS – Asian Symposium on Programming Languages and Systems – 2022.

COORDINATION – International Conference on Coordination Models and Languages – 2023.

ECOOP – European Conference on Object-Oriented Programming – 2023.

ICFP – International Conference on Functional Programming – 2022, 2023.

PLDI – Programming Language Design and Implementation – 2022, 2023.

PPoPP – Principles and Practice of Parallel Programming – 2023.

SOSP – Symposium on Operating Systems Principles – 2023.

**Extended Review Committee.**

ECOOP Research Papers – 2023.

Reviewer **Journals.**

The Journal of Open Source Software – 2023.

Organizer **Organizing Committee.**

SERPL – The Southeast Regional Programming Languages Seminar – 2023.

Volunteer In-person student volunteer at CAV’23 and POPL’23 and SPLASH’22.

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## University Service

2023–2024 Representative in the Graduate Student Government Association (GSGA), *Augusta University*.


2023–2024 GSGA Funding/Databases Ad Hoc Committee, *Augusta University*.


2023–2024 Vice President and founding member of ΔΔΔ student organization, *Augusta University*.


2021–2023 Member of The Graduate School’s Graduate Student Council, *Augusta University*.

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## Seminars & Schools


2023  International Autumn School on “Proof and Computation”, Herrsching, Germany, September 10–16, 2023.


2023  Verification Mentoring Workshop (VMW) at CAV 2023 conference, Paris, France, July 18, 2023.

2023  Twelfth Summer School on Formal Techniques (SSFT23) & the First Formal Methods in the Field Bootcamp, *on principles and practice of formal techniques*, Atherton, CA, USA, May 24–June 2, 2023.

2022  Programming Languages Mentoring Workshop, PLMW @ PLDI 2022, San Diego, CA, USA, June 13–14, 2022.

2021  Static Analyses of Program Flows: Types and Certificate for Complexity, Dagstuhl Seminar 21453, Schloss Dagstuhl, Germany, November 7–12, 2021.

2021  Oregon Programming Languages Summer School (OPLSS 2021), *on foundations of programming and security*, online, June 14–26, 2021.

4/2021  Midlands Graduate School, *in the foundations of computing science*, online, April 12–16, 2021.

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## Industry Experience

2020–2021 Senior Consultant, *Rural Sourcing Inc.*, Augusta, GA, front-end web application development.

2018–2019 Android Developer, *TaxSlayer*, Augusta, GA, mobile application design and development.

2014–2018 Software Developer, *TaxSlayer*, Augusta, GA, full stack web application design and development.

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## Awards

8/2023 Travel Award, \$1,000, *by The Graduate School at Augusta University*, to attend the 21st International Symposium on Automated Technology for Verification and Analysis (ATVA’23) conference in Singapore.

5/2023 Verification Mentoring Workshop scholarship, *by VMW 2023 organizers*, to attend verification mentoring workshop (VMW) and Computer Aided Verification (CAV’23) conference in Paris, France.

- 1/2023 Student Research Program, \$1,000, *by Augusta University Provost's Office and the Translational Research Program of the Department of Medicine at Medical College of Georgia*, for dissertation research.
- 10/2022 Travel Award, \$1,000, *by The Graduate School at Augusta University*, to attend the 50th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL'23) conference in Boston, Massachusetts, USA.
- 5/2022 Programming Languages Mentoring Workshop scholarship, *by ACM SIGPLAN*, to attend PLMW @ PLDI 2022 and the PLDI'22 conference, in San Diego, California, USA.
- 4/2022 Excellence in Research in Computer & Cyber Sciences, \$100, *by The Graduate School at Augusta University*, for presentation at Augusta University 37th Annual Graduate Research Day.
- 12/2021 VMCAI 2022 Student Travel Fellowship, \$1,500, *by VMCAI'22 organizers*, to attend the Verification, Model Checking, and Abstract Interpretation (VMCAI'22) conference in Philadelphia, Pennsylvania, USA.
- 11/2021 Travel Award, \$1,000, *by The Graduate School at Augusta University*, to attend Laboratoire d'Informatique de Paris Nord (LIPN) seminar in Paris, France.
- 8/2015 Grace Hopper Scholarship, *by Georgia Institute of Technology*, to attend Grace Hopper Celebration of Women in Computing (GHC'15) conference in Houston, Texas, USA.
- 4/2014 Outstanding Computer Science Student Award, *by Augusta University*, for academic excellence, awarded annually to one graduating student.
- 2013–2014 Savannah River Scholars Program (SRSP) Scholarship, \$7,800, *by Augusta University and funded by National Science Foundation*.

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## Languages

English, Finnish