Neea Rusch

Curriculum vitae

School of Computer and Cyber Sciences 1120 15th Street, Augusta, GA 30912 ☑ nrusch@augusta.edu ♣ nkrusch.github.io

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. Taught in fall 2019, spring 2020, fall 2020, spring 2021, summer 2021, fall 2021.

2019–2019 **CSCI 1200 - Introduction to Computers and Programming**, *Instructor*, Augusta University. Taught in spring 2019 and summer 2019.

Publications

- [3] 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.
- [2] 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.
- [1] 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.

Talks & Presentations

- 2023-03-10 SCOT: A Seminar on Semantic and Formal Approaches to Complexity, virtual.
- 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, Augusta University, USA.

— 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.

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

PPoPP - Principles and Practice of Parallel Programming - 2023.

Extended Review Committee.

ECOOP Research Papers - 2023.

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

University Service

2021-2023 The Graduate School - Graduate Student Council, Augusta University.

Representative of School of Computer and Cyber Sciences.

Seminars, Summer & Winter Schools

- 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*, Germany, November 7–12, 2021.
- 2021 **Oregon Programming Languages Summer School**, on Foundations of Programming and Security, virtual, June 14–26, 2021.
- 2021 Midlands Graduate School, in the Foundations of Computing Science, virtual, April 12–16, 2021.

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.

Awards

- 2022 **Student Research Program**, \$1000 awarded by Provost's office and the Translational Research Program of the Department of Medicine, Medical College of Georgia at Augusta University.
- 2022 **Programming Languages Mentoring Workshop scholarship**, awarded by ACM SIGPLAN. To attend PLMW @ PLDI 2022 and the PLDI'22 conference, in San Diego, California.
- 2022 **Excellence in Research Computer & Cyber Sciences**, \$100 awarded by The Graduate School. For presentation at Augusta University 37th Annual Graduate Research Day.
- 2021 VMCAI 2022 Student Travel Fellowship, \$1500 awarded by the VMCAI PC.

 To attend Verification, Model Checking, and Abstract Interpretation conference in Philadelphia, Pennsylvania.
- 2015 **Grace Hopper Scholarship**, awarded by Georgia Institute of Technology. To attend Grace Hopper Celebration of Women in Computing conference in Houston, Texas.
- 2014 **Outstanding Computer Science Student Award**, awarded by Augusta University. Awarded annually to one graduating student for academic excellence.
- 2013 **Savannah River Scholars Program (SRSP) Scholarship**, \$7800 awarded by Augusta University, funded by National Science Foundation.

Languages

English, Finnish