# Neea Rusch

## Curriculum vitae

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### Education

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

- [2] 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.
- [1] 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.
- [0] 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.

#### Academic Service

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

- 2023 COORDINATION International Conference on Coordination Models and Languages.
- 2023 ECOOP European Conference on Object-Oriented Programming.
- 2023 PPoPP Principles and Practice of Parallel Programming.
- 2022 APLAS Asian Symposium on Programming Languages and Systems.
- 2022 ICFP International Conference on Functional Programming.
- 2022, 2023 PLDI Programming Language Design and Implementation.

#### Talks & Presentations

- 2023-01-21 The 9th International Workshop on Coq for Programming Languages (CoqPL 2023), Boston, USA.
- 2023-01-16 Verification, Model Checking, and Abstract Interpretation (VMCAI 2023), Boston, USA.
- 2022-12-06 The SPLASH Doctoral Symposium (SPLASH'22), University of Auckland, New Zealand.
- 2022-06-20 28th International Conference on Types for Proofs and Programs (TYPES'22), *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.

## 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.

#### **Awards**

- 2022 **Student Research Program**, awarded by Provost's office and the Translational Research Program of the Department of Medicine, Medical College of Georgia at Augusta University, Fall'22. \$1,000 for dissertation research.
- 2022 **Programming Languages Mentoring Workshop scholarship**, awarded by ACM SIGPLAN. To attend PLMW @ PLDI 2022 and the PLDI'22 conference, in San Diego, CA, USA.
- 2022 Excellence in Research Computer & Cyber Sciences, awarded by The Graduate School. \$100 for presentation at Augusta University 37th Annual Graduate Research Day.
- 2021 VMCAI 2022 Student Travel Fellowship, awarded by the VMCAI PC. \$1,500 stipend for attending VMCAI'22 conference in Philadelphia, PA, USA.
- 2021 **Travel Funding**, awarded by The Graduate School. \$1,000 toward travel to the LIPN seminar in Paris, France.
- 2015 **Grace Hopper Scholarship**, awarded by Georgia Institute of Technology.

  To attend Grace Hopper Celebration of Women in Computing GHC'15 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**, awarded by Augusta University. \$7,800 stipend funded by National Science Foundation.

# **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.

# **University Service**

2021–2023 **The Graduate School - Graduate Student Council**, Augusta University. Representative of School of Computer and Cyber Sciences.

#### Other Service

2022 **Volunteering**, in-person student volunteer at SPLASH'22 conference.

# Languages

English, Finnish