Neea Rusch

Curriculum vitae

School of Computer and Cyber Sciences
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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. For 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. For 2 semesters: spring 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, 2023.
PLDI – Programming Language Design and Implementation – 2022, 2023.
PPoPP – Principles and Practice of Parallel Programming – 2023.

Extended Review Committee.
ECOOP Research Papers – 2023.

Reviewer **Journals**.
The Journal of Open Source Software.

Organizer **Committee Member**.
The Southeast Regional Programming Languages Seminar (SERPL) – 2023.

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

University Service

2023–2024 Vice President and founding member of $\Delta\Lambda\Delta$, student organization, *Augusta University*.
2021–2023 Member of The Graduate School's Graduate Student Council, *Augusta University*.

Seminars & Schools

2023 Twelfth Summer School on Formal Techniques (SSFT23) & 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*, 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

2023 Verification Mentoring Workshop scholarship, awarded by VMW 2023 organizers.
To attend verification mentoring workshop and the CAV'23 conference, in Paris, France.

2022 Student Research Program, $1000 – awarded by Provost's office and the Translational Research Program of the Department of Medicine, MCG at Augusta University, 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, US.

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 VMCAI'22 organizers.
To attend Verification, Model Checking, and Abstract Interpretation conference in Philadelphia, PA, US.

2015 Grace Hopper Scholarship, awarded by Georgia Institute of Technology.
To attend Grace Hopper Celebration of Women in Computing'15 conference in Houston, TX, US.

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