

CURRICULUM VITAE

Philip Kaludercic

2025-10-30

1. Formal Education

1.1. Bachelor of Science in Computer Science

From 2017-2021, at the University of Erlangen-Nuremberg.

Next to the regular undergraduate courses, I took lectures focusing on operating systems, combinatorial optimization and artificial intelligence.

Bachelor's Thesis in the field of combinatorial optimization.

1.2. Master of Science in Computer Science

From 2021-2025, at the University of Erlangen-Nuremberg.

Specialising in theoretical computer science (type theory, category theory and logic). I also took lectures on compiler design.

Master's Thesis in the field of coalgebra and topos theory.

1.3. PhD in Computer Science

Ongoing since 2025, at Radboud University in Nijmegen.

Member of the ERC Consolidator Project COCONUT, researching compiler verification for deep concurrency properties.

2. Professional/Teaching History

2.1. Student Assistant for "Algorithms and Data structures" (2018)

Responsible for teaching a course of first-semester students, introducing the notion of computational thinking using Java. I was also co-responsible for a weekly computer lab session.

2.2. Student Assistant for "Systems Programming" course (2019-2024)

Held a class and a computer lab introducing second- and third-semester students to systems programming in the UNIX/C tradition, with an emphasis on POSIX and GNU/Linux tooling. From 2023-2024 I was responsible for two separate groups.

I took an initiative to improve homework review tooling, collect links and resources of further interest, wrote a didactic fault injection program and prepared a quiz with commentary on questions from previous exams.

2.3. Student Employee at Framatome (2024-2025)

Implemented a cryptographic protocol for embedded systems.

3. Skills and Abilities

3.1. Languages

Effectively fluent in English, German and Serbo-Croatian. Learning Dutch.

3.2. Technological

Advanced Experience with C, Emacs Lisp, Common Lisp, Go, POSIX Shell, AWK, LaTeX.

Reasonable Experience with Java, Python, Make, Perl 5, Haskell, x86 Assembler, Coq, SQLite, ECMAScript, HTML and CSS, Git, GIMP

Dabbled with Agda, Standard ML, Plain TeX, OCaml, C++, Idris, PostScript, Ada, Prolog, Lambda-Prolog, Smalltalk, ALGOL 68, Lua, M4, APL, K, Pascal, Fortran 77, Forth, MySQL, PostgreSQL, SVN, Fossil, RCS, CVS, Inkscape.

I am also experienced with reading and writing technical documentation (TeXinfo, mdoc). Capable of using and administering Linux distributions of the Debian and Red Hat families, as well as OpenBSD.

4. Further References

- Personal Website: <https://sdf.org/~pkal/>.
- Academic Website: <https://cs.ru.nl/~pkal/>.
- Email: pkal at posteo dot net or cs dot ru dot nl.