

# Robert Klink

✉ roberthlink@gmail.com | 🌐 R0mbertus | 🌐 Robert Klink | 📍 Amsterdam, The Netherlands

## Education

### MSc. Computer Security

Vrije Universiteit (VU)

Amsterdam

Sep. 2024 - Present

### BSc. Computer Science

Vrije Universiteit (VU)

Amsterdam

Sep. 2021 - Jun. 2024

## Experience

### Software Engineering Intern - Atlas team

RIPE NCC

Amsterdam

Jun. 2024 - Oct. 2024

- Developed a proof-of-concept reimplementation of the Probe software that maintained compatibility between CPython and MicroPython
- Gathered requirements from stakeholders, and used these to write both a functional and technical design document
- Contributed to Open Source projects to add functionality needed for the Proof of Concept implementation

### Teaching Assistant

Vrije Universiteit (VU)

Amsterdam

May. 2023 - May. 2024, Jan. 2025 - Present

- Supported teaching of the courses Computer Programming Project, Object Oriented & Functional Programming, Software Design, Logic & Modeling, and (Advanced) Compiler Construction
- Assisted students with assignments by helping them digest their problems and guiding them to a solution

### Internal Affairs & Head of Infra

Studsec - Student Security Association

Amsterdam

Sep. 2024 - Present

- Worked on infra projects, such as a discord bot and automatic infra deployments, using python, docker, ansible, and more
- Lead regular infra meetings, keeping a group of people up-to-date and assigning them tasks

## Projects

### StructZone

Naive sanitizer of structs in C with redzones using the LLVM tool-chain

github

2025

- Worked with a group to design and implement a sanitizer for C-style Structs using the LLVM tool-chain
- Developed comprehensive tests and benchmarks to assess correctness and runtime performance
- Wrote a report outlining the design, implementation details, experimental results, and future improvements

### BSc. Thesis Project

How do different forward-edge Control-Flow Integrity policies compare in terms of performance, security, and compatibility?

github

2024

- Implemented a selection of control-flow integrity policies using the LLVM tool-chain
- Benchmarked multiple forward-edge CFI policies using SPEC CPU, RIPE64, and conFIRM, quantifying trade-offs between security and performance

### Compiler Construction

Fennec compiler using the LLVM tool-chain

Coursework

2024

- Completed assignments that covered front-end parsing and different kinds of code passes on a toy language, called fennec
- Wrote additional tests to provide better coverage on the different assignments
- Completed part of the bonus assignment by implementing register randomization on LLVM

### Advanced Network Programming

User-space ICMP, TCP networking stack

Coursework

2024

- Completed assignments in a group on implementing a user-space network stack on a given framework that dealt with ICMP and TCP packets
- Wrote a report to analyze the performance of our networking stack against the Linux stack
- Had lectures on topics such as Linux networking internals, Multi-core scalability, BGP, Anycast and more

## Skills

**Programming Languages** Python, C, C++, Rust, Java, x86-64 assembly

**Developer Tools** Git, Docker, Make, Cargo, Ansible, Terraform, Shell-scripts

**Spoken Languages** English, Dutch