



# Thomas De Backer

*Life starts where your comfort zone ends.*

## Education

- 2016–2019 **Masters in Engineering: Computer Science**, *KU Leuven*, Leuven.  
Specialization: Distributed Systems
- 2013–2017 **Bachelor in Engineering: Computer Science and Electrical Engineering**, *KU Leuven*, Leuven.

## Experience

- 2021–Present **Software Engineer**, *Google*, Munich, Germany.  
Working on Identity and Compliance Control infrastructure.
- 2019–2021 **Embedded Software Consultant**, *Nalys*, Brussels, Belgium.
- 2020–2021 **Embedded Software Engineer**, *SoftAtHome*, Wijnmaal, Belgium.  
Working on the networking team focused on the development of new features for home gateways and networking equipment. Activities include development of:
- New HGW Security features in an embedded Linux environment.
  - R&D of traffic monitoring and deep packet inspection applications.
- 2019 **Embedded Software Engineer**, *Nokia*, Antwerp, Belgium.  
Member of the team converting the old buildroot based buildsystem to the Bazel buildsystem.
- Summer 2017 **Internship**, *NVISO BE*, Brussels.  
Developing an OSINT application in Python/Flask. The internship consisted of market research, developing the program architecture (front-end and back-end) and the final implementation. Experience acquired with ElasticSearch and YARA.

### Student association activities

- 2017–2018 **Vice-president**, *ULYSSIS*, Leuven.  
Tasks include keeping track of member projects, improving the inner working of the organization and organizing activities. These include a CTF and Jobfair.
- 2018–2019 **Vice-president**, *Lerkeveld Praesidium*, Leuven.  
As vice-president of the student association Lerkeveld, my responsibilities included budget management, conflict resolution, coordinating different teams within the student organization.
- 2014–2019 **IT**, *Lerkeveld Praesidium*, Leuven.  
Part of the IT division of the Praesidium, of which two years as Group Coordinator (2016–2018).

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## Awards and Honors

- 2018 **Finalist Google Hash Code**, *team ZG1ja2J1dHQK*.
- 2017 **1st place Cyber Security Challenge Belgium**, *team ZG1ja2J1dHQK*.
- 2017 **3rd place EBEC Leuven**, *An engineering competition*.
- 2015, 2016 **Finalist Cyber Security Challenge Belgium**, *team ZG1ja2J1dHQK*.  
Twice finalist, winners of the 2016 Qualifying round.
- 2013 **Finalist Belgian Informatics Olympiad**.

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## Extracurricular activities

- Autumn 2017 **SANS course**.  
SEC560: Network Penetration Testing and Ethical Hacking by Jeff McJunkin.
- Spring 2017 **BruCON training**.  
Open Source Defensive Security by Leszek Miś.
- 2013–Present **Competitive programming**.  
Participated in numerous contests such as Google Code Jam, Google Hash Code, COMA (PRIME), Vlaamse Programmeer Wedstrijd.
- 2013–Present **Conferences**.  
Attended conferences such as FOSDEM, BruCON, CCC and DEFCON.

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## Technical skills

### Programming Languages

- PYTHON **Expert**, Professional experience and general go-to language.
- JAVA **Advanced**, Extensive professional experience.
- C++ **Advanced**, Professional experience.
- other RUST, TYPESCRIPT, POSTGRESQL, GO.

### Relevant skills

- Google SWE Core Google Technologies, Distributed Systems, Reliability Engineering, Monitoring, Buildsystems, System design.
- Linux Buildroot, Kernel module development, gdb, POSIX shell, Linux networking.
- Security Radare2, Fuzzing, passionate about computer security, capture-the-flag player.
- other Git, vim, System administration, UNIX/Linux.

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## Communication Skills

- 2020–Present Driving member of office culture activities and fun events.
- 2017–2019 Organizing the Google Hash Code Leuven hub.
- 2016–2017 Presenting multiple L<sup>A</sup>T<sub>E</sub>X Workshops (ULYSSIS).

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## Interests

- FOSS
- Competitive programming
- Computer security
- Functional Programming