Simon Bos

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29/06/1995

Education

2018-2019   **Master of Artificial Intelligence**, *KU Leuven*, Leuven, *Summa Cum Laude*
Specialization in Big Data Analytics
Thesis at research group COSIC: 'Secure Machine Learning for Privacy Preserving Genetic Disease Identification'.

2016-2018   **Master of Engineering: Computer Science**, *KU Leuven*, Leuven, *Cum Laude*
Specialization in Distributed Systems
Thesis at research group DistriNet: 'Patch it like it's hot: Exploring online patching practices'.

2013-2016   **Bachelor of Engineering**, *KU Leuven*, Leuven, *Cum Laude*
Major in Computer Science, Minor in Electrical Engineering

Experience

Professional

2022-present   **Software Engineer**, *nexuzhealth*, Leuven
Software engineer at nexuzhealth, focusing on the architecture and programming of microservices for messaging systems, document storage and templating engines. Main technologies: Go, Java, Angular, gRPC, Google Cloud, Spanner.

2021-2022   **PhD Candidate Electrical Engineering**, *WaveCore @ KU Leuven*, Leuven
PhD Candidate Electrical Engineering at research group Networked Systems (WaveCore) at ESAT, KU Leuven. Investigating the application of machine learning for optimizing state-of-the-art wireless communication algorithms. Supervised by Prof. dr. ir. Sofie Pollin.

2019-2020   **Solution Architect / Data Engineer**, *Telenet*, Mechelen
Member of the *Data Architecture and Governance* and *Data Platform* teams; mainly working on projects related to cloud migration of data engineering and data science applications. Main technologies: Scala, Apache Spark, Apache Hadoop, AWS.

2017   **Summer Internship**, *Secure Code Warrior*, Bruges
As part of my master in Computer Science at the KU Leuven, I gained experience as a summer intern at Secure Code Warrior: an exciting, international AppSec start-up. I researched security vulnerabilities and best practices in Flask (a microframework for Python).

Voluntary

2017-2018   **President**, *Lerkeveld Praesidium*, Leuven
As president of the student association Lerkeveld, my responsibility was the total functioning of the organization. I managed a group of 7 teams, each consisting of 4-10 people who were in charge of organizing events for 150 members and 100 honorary members.

2015-2019   **IT Representative**, *Lerkeveld Praesidium*, Leuven
IT member from 2015-2018, IT group coordinator from 2018-2019. As member of the team IT of the student association Lerkeveld, my main responsibilities were:
○ Assisting our student residence with the IT infrastructure.
○ Developing and maintaining a website, using Python (Flask) and React.
Our open source projects are visible on `https://github.com/lerkeveld`.

Honors and awards

2019	**Third place**, *Flemish Programming Contest*	
	Third place in category for master's students, doctoral students, graduates and professionals.	
2018	**Finalist**, *HashCode 2018*, Google	
	Invited to the Google Dublin office to participate in the finals.	
2017	**Winner**, *Cyber Security Challenge Belgium*, NVISO	
	Winner of the 2017 Finals	
2015-2017	**Finalist**, *Cyber Security Challenge Belgium*, NVISO	
	Thrice finalist, winner of the 2016 Qualifying Round	
2014	**Runner-up**, *Alumni Engineers Price*, KU Leuven	
	The Alumni Engineers Price is a price for a design task for teams of bachelor students of the Engineering Science faculty. My team developed a computer vision application for detecting and registering people passing by.	

Technical skills

Programming languages

Go	**Expert**, significant professional and web development experience
Python	**Expert**, significant professional, problem-solving and web development experience
Java	**Expert**, significant professional experience
Scala	**Experienced**, good professional experience
Other	JavaScript, C++, C, R, MATLAB, Node.js, Haskell, Prolog, ECLiPSe

Relevant skills

DevOps	UNIX/Linux system administration, Hadoop ecosystem, git, Docker, Kubernetes, CI/CD (Jenkins, GitLab CI/CD), vim, IntelliJ IDEs, Visual Studio Code
Frontend	Pure HTML, CSS and JavaScript; Angular; React; MUI (Material-UI)
AWS	± 3 year of professional and pet-project experience
Google Cloud	± 2 year of professional experience
Security	Passionate about software security, capture-the-flag player
Competitive programming	Competed in online, local and country-wide contests such as Google Code Jam, Google Hash Code and the Flemish Programming Contest
Challenges	Enthousiastic about challenges such as Project Euler (mathematical), Cryptopals Crypto Challenges (cryptography), Belgian Defence Year-End Puzzle (cryptography / varia)

Courses

2017	SANS SEC560: Network Penetration Testing and Ethical Hacking
2017	Defensive Security: Open Source Defensive Security

Language Proficiency

Dutch	Native proficiency
English	Professional working proficiency
French	Limited working proficiency
Bulgarian	Basic

General Interests

Sports	All kinds of sports: (beach) volleyball, running, ping pong
Cooking	Trying out different kinds of food
Movies	Mostly science fiction
Games	Fan of typical old school strategy games such as Age of Empires II
Favorite OS	Arch Linux with KDE Plasma