

# JELLE VOS

## Delft University of Technology

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📍 Delft, Zuid-Holland - Netherlands

🌐 <https://github.com/jellevos>

## EXPERIENCE

### PhD Student

#### Delft University of Technology

📅 Jul 2021 – Now

📍 Delft, Netherlands

- Doing research in homomorphic encryption-based multi-party computation, optimizing arithmetic circuits
- Teaching about fully-homomorphic encryption

### Teaching Assistant

#### Delft University of Technology

📅 Aug 2020 – Jan 2021

📍 Delft, Netherlands

- Coordinating the physical shared study labs for MSc students during the pandemic
- Helping students with questions about cryptography, machine learning and statistics
- Answering questions and checking students' work for Security & Cryptography

### Software Development Intern

#### ING Group

📅 Apr 2018 – Jul 2018

📍 Amsterdam, Netherlands

- Working Agile in a team of four students
- Building a real-time collaborative work environment for Customer Journey Experts using Polymer
- Users were enthusiastic and ING has continued developing the application

## HIGHLIGHTED RESEARCH

### Efficient Circuits for Permuting and Mapping Packed Values Across Leveled Homomorphic Ciphertexts

Conference paper, published at ESORICS 2022

### Compare Before You Buy: Privacy-Preserving Selection of Threat Intelligence Providers

Workshop paper, published at IEEE WIFS 2021

### Multi-Party Private Set Intersection Protocols for Practical Applications

Conference paper, published at SECRYPT 2021

### Practical Multi-party Private Set Intersection Protocols

Journal paper, published at IEEE T-IFS 2021

## PROGRAMMING LANGUAGES

Rust

Python

C/C++

## EDUCATION

### MSc Computer Science: Cyber Security

#### Delft University of Technology

📅 Sep 2019 – Jun 2021

### BSc Computer Science & Engineering

#### Delft University of Technology

📅 Sep 2015 – Jan 2019

### Bilingual VWO - Gymnasium

#### Grotius College Delft

📅 Aug 2009 – Jul 2015

## EXTRACURRICULAR

### Board Member & Volunteer

#### DWH & Outsite

📅 Feb 2016 – Present

- Committee work, promoting DWH & Outsite, Delft's LGBT+ associations
- Chaired Outsite, LGBT+ youth association
- Board member at DWH

### Software Developer

#### LOBSTER

📅 May 2018 – Nov 2020

- Building a low-cost autonomous deep sea exploration robot
- Working in a multidisciplinary team
- Developing control & navigation software in Python

## INTERESTS

### Privacy-Enhancing Technologies

In a world growing more digital by the day, we are giving up privacy without knowing the consequences. I want to research protocols that allow the same digital comfort without giving up privacy, such as private set intersections.

### Mathematics & Fundamental Computer Science

In my studies I found that I liked the theoretical side of computer science as much as I liked the practical side. I want to broaden my mathematical knowledge to better understand the fundamental problems. Topics include number theory & discrete optimization.