

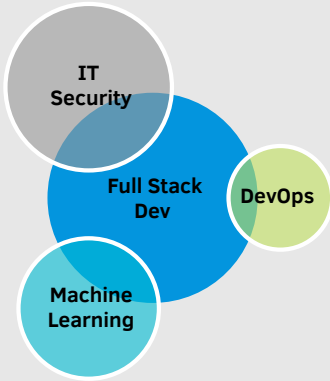
LUKAS ALBER

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Technical Skills



JS • Angular • React • CSS

C • C++

Python • TensorFlow • Pandas

Kotlin • Java • Spring

Kotlin • Java • Mobile Dev

Education

BSc. Software Engineer & Management
Graz University of Technology
2013 - 2017 | Austria

MSc. (Dipl.-Ing.) Computer Science

Graduated with distinction

Specializations (lecture catalogs):

- Computational Intelligence (i.e. ML)
- Computer Graphics
- IT Security (*Thesis*)

Graz University of Technology

2017 - 2020 | Austria

Student Research Excellence Award

Institute of Applied Information Processing and Communications (IAIK)

2017 & 2020 | Austria

Languages

German, English, Italian (all fluent)

Past Projects

Spring
2016

Undergraduate Teaching Assistant IAIK – Graz University of Technology

- Practical Lecture on [Operating Systems \(C, C++\)](#).
- Starting from a basic OS skeleton (SWEB), students learn to implement system calls, processes, multithreading, memory management including swapping, security features like address space layout randomization and more.

Summer
2016&2017

Internship

IAIK – Graz University of Technology

- In the E-Government department EGIZ.
- Implementation of a multi-platform prototype app for signing PDF documents with qualified signatures (compliant with EU Regulation No 910/2014).
- A separate **Android** and **iOS** app, both written in **Xamarin** featuring a native look and feel, but relying on a common cross-platform signature endpoint library.

Nov 2017
-Oct 2020

Student Researcher

IAIK – Graz University of Technology

- Participating in E-Government EU Projects [Lightest](#) and [Kraken](#) as a software engineer (**Java** Front- and Backend).
- Contributions to internal projects of the SIC Department ([Security & Cryptography Libraries](#) written in **Java**).
- Conducting research in the fields of TLS, Identity-based Signatures and Content Delivery Networks (CDNs).

Nov 2020
-Aug 2022

IT Security Researcher

IAIK – Graz University of Technology

- Participating in E-Government EU Projects [Kraken](#) and [mGov4Eu](#).
- Contributions to projects of the [A-SIT](#) Department, i.e. a versatile set of e-Government libraries & applications (Java & **Kotlin** Spring, Mobile **App Dev**, fix Legacy Systems, occasional DevOps).
- Conducting research in the fields: Web 3.0, Self Sovereign Identity, Distributed Ledgers, TLS, Edge Computing, AI.

Oct 2022
- now

Software Freelancer

Freelance

- Maintaining and extending software regarding the qualified European digital signature for [PrimeSign](#) (**Java** Spring, GWT, Liquibase, IT-security & maintainability focus, scrum).

Selected Publications

- [1] Lukas Alber, Stefan More, Sebastian Mödersheim, and Anders Schlichtkrull. "Adapting the TPL trust policy language for a self-sovereign identity world". In: *Open Identity Summit 2021* (2021).
- [2] Lukas Alber, Stefan More, and Sebastian Ramacher. "Short-Lived Forward-Secure Delegation for TLS". In: *Proceedings of the 2020 ACM SIGSAC Conference on Cloud Computing Security Workshop*. 2020, pp. 119–132.
- [3] Thomas Lenz and Lukas Alber. "Towards cross-domain eID by using agile mobile authentication". In: *2017 IEEE Trustcom/BigDataSE/ICSS*. IEEE. 2017, pp. 570–577.
- [4] Sebastian Mödersheim, Anders Schlichtkrull, Georg Wagner, Stefan More, and Lukas Alber. "TPL: A Trust Policy Language". In: *IFIP International Conference on Trust Management*. Springer. 2019, pp. 209–223.
- [5] Blaž Podgorelec, Lukas Alber, and Thomas Zefferer. "What is a (Digital) Identity Wallet? A Systematic Literature Review". In: *2022 IEEE 46th Annual Computers, Software, and Applications Conference (COMPSAC)*. IEEE. 2022, pp. 809–818.