



github.com/AKra1906

# Tristan Döring

## SOFTWARE ENGINEER

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I am a motivated software engineer with a strong background in information security seeking a challenging software engineering position.

## EXPERIENCE

### WORKING STUDENT FOR CYBERSECURITY

FEV.IO GMBH (ENGINEERING PROVIDER FOR BMW)  
September 2022 – February 2023

- Analyzed ongoing automotive projects at BMW regarding Cybersecurity ISO-standards for road vehicles
- Conducted research on Fuzz-Testing automotive networks. This initiative led to the decision to incorporate Fuzz Testing into project testing strategies.

**Recommendation letter: very satisfactory**

### TEAM PROJECT: SERVICE SECURITY

2024

- Developed a security focused chat application and backend API using **Ruby**
- Utilization of Security Tokens, Single-Sign-On, encrypted SQL database and session cookies
- Deployment on cloud-platform Heroku

**Grade: 4.3** (from 4.3 = very good to 0 = fail)

### BACHELOR THESIS: PACKET SELECTION USING CONCEPTS FROM IPFIX AND PSAMP

CHAIR OF NETWORK ARCHITECTURES AND SERVICES (TUM)  
2023

- Derived a new network packet selection architecture from the IPFIX and PSAMP group of RFC internet standards.
- Implemented an open-source tool using **Python** ([GitHub](#))
- Initialized significant updates in the network monitoring toolkit "Vermont" at TUM.

**Grade: 1.6** (from 1 = very good to 5 = fail)

## EDUCATION

*Expected graduation 2025*

**National Tsing Hua University (NTHU) | Hsinchu, Taiwan**

M. Sc

Institute for Information Security

**Current GPA: 4.3**

2024

**Google Cybersecurity Certificate**

2023

**Technical University of Munich (TUM) | Munich, Germany**

B. Sc in Informatics

## SKILLS

- Programming (**Python**, **Ruby**, C, PHP, SQL)
- Secure Software Engineering
- Network Security
- Machine Learning
- Git
- Linux line-command
- Security frameworks, controls, design principles

## LANGUAGES

- **German**  
Native speaker
- **French**  
Intermediate
- **English**  
Fluent  
TOEFL iBT: 103/120
- **Mandarin Chinese**  
Conversational  
TCFL Novice 2

### SELF-EMPLOYMENT AS WEB DEVELOPER

2021 - 2023

- Collaborated with a graphic design agency to implement customer-editable websites
- Rapidly acquired the necessary technical skills through self-study to realize these projects using **PHP**, **CSS**, **HTML**, and **JavaScript**.

The websites remain in use and are **actively maintained to date** (e.g. [sweet-magazin.com](http://sweet-magazin.com)).

### TEAM PROJECT: OPERATING SYSTEMS – SEL4 & TRENTOS

2022

- Developed a self-driving drone algorithm and network protocol using in **C**
- Prototyping in **Python**, tailoring the Operating Systems components of the microkernel, and finalizing development and integration in C on a SoC

**Grade: 1.0** (from 1 = very good to 5 = fail)

### MACHINE LEARNING PROJECT: CANDIDEMIA MORTALITY PREDICTION

NATIONAL YANG MING CHIAO TUNG UNIVERSITY (NYCU)  
2024

- Developed a high-accuracy predictive model for healthcare decision-making
- Utilized binary classifiers focusing on performance metrics like F1 score, MCC, and AUROC
- Employed Python scikit-learn for model development and evaluation

**Course Grade: 4.3** (from 4.3 = very good to 0 = fail)

### AI PROJECT: STRATEGIC GAME AI FOR "STRANDS"

NATIONAL YANG MING CHIAO TUNG UNIVERSITY (NYCU)  
2024

- Implemented Minimax algorithm with alpha-beta pruning and Monte Carlo Tree Search (MCTS) using multithreaded **Python**
- Developed heuristics for evaluating board states and moves
- Optimized AI decision-making within a 30-second time limit per move

**Course Grade: 4.3** (from 4.3 = very good to 0 = fail)

## PUBLICATION

### SMARTNICS: CURRENT TRENDS IN RESEARCH AND INDUSTRY

2021

Döring, T., Stubbe, H., & Holzinger, K. (2021)  
Network, 19 (doi: 10.2313/NET-2021-05-1\_05).