# **Felix Leitner**

3rd-Year Integrated Master's Computer Science Student - University of St Andrews

#### **WORK EXPERIENCE**

# **TrackX Technology,** Hillsborough, NC (USA) — Development Intern

JULY 2023 - AUGUST 2023

- Developed an internal .NET tool for managing remote product deployments in hospital operating rooms, which included cryptographic key generation and data encoding
- Created an expandable Python tool for exploring and visualizing SQLite datasets
- Led efforts to create a Slack-based automated notification system to track and notify of product deployment status

# **Loft Design**, Providence, RI (USA) — Full-Stack Developer

SEPTEMBER 2022 - PRESENT

- Implemented a new company site using Webflow and custom CSS / JS
- Integrated web forms with third party marketing platforms
- Collected and processed product test data using Python

# West Dennis Yacht Club, Cape Cod MA (USA) — Junior Sailing Instructor

SUMMER 2020 - SUMMER 2022

- Taught sailing and racing techniques, safety, and right of way

#### **EDUCATION**

# **University of St Andrews,** Scotland — *Computer Science MSci* (Honours)

SEPTEMBER 2022 - PRESENT

- Started with second-year-level courses (direct entry)
- Projected for a First Class Honours degree

### Classical High School, Providence, RI (USA)

**SEPTEMBER 2019 - JUNE 2022** 

- 99.33 GPA - Ranked 6 / 260

#### **PROJECTS**

### Vertically Integrated Project: "Using AI for Decision Making"

- One of 4 computer science students rewriting Conjure, a constraint programming tool, using Rust
- Responsible for model parsing and refinement, as well as encoding for SAT solvers

## Vertically Integrated Project: "Dolphin Acoustics"

 Initiated and played an active role in an Object-Oriented, expandable and more user-friendly rewrite of a neural network application for classifying dolphin whistles

### St Andrews Folk & Traditional Music Society — Treasurer

 Responsible for general and event budget management, primarily for a popular festival event with international attendance

#### **SKILLS**

Engaging, invested team member — experienced at working out tough problems with others

**Quality of work** — dedicated to robustness and usability

- Networking and applications of cryptography
- Frontend design and development; backend architecture
- Node.js, Express, Jekyll, Webflow, .NET, Jupyter
- MS Visual Studio, Visual Studio Code, Git

#### **COMMUNITY / AWARDS / CERTIFICATIONS**

One of 5 students statewide to advise the development of a Computer Science curriculum in Rhode Island public schools

**PSIA Certified Ski Instructor** 

**US Sailing Certified Sailing Instructor** 

**Best Team Award in Parliamentary Debate** at the RI Forensic League for — 2018/19

#### **PROGRAMMING LANGUAGES**

| Python     | 7 years  |
|------------|----------|
| HTML / CSS | 4 years  |
| Javascript | 3 years  |
| Java       | 1 year   |
| C          | 1 year   |
| Haskell    | 1 year   |
| C#         | < 1 year |
| SQL        | < 1 year |
| Rust       | < 1 year |

#### **COURSEWORK**

- Software engineering team project Flask,
  React, TypeScript
- Movie database web app Node.js and Express, AJAX model
- Reliable UDP file sharing application with loss recovery — Java
- Several projects using test-driven development
- Interpretive calculator language with file execution Haskell
- Pipeline implementation using a custom thread-safe queue — C, Valgrind
- Gomoku AI using Minimax with an aggressive move selection heuristic — Haskell, Gloss