# Jérémi Do Dinh



### EXPERIENCE

#### Software Engineering Intern at SonarSource

September 2023 - February 2024

- Contributed to the development and maintenance of new and existing features for Python analysis, operating within a Scrum framework.
- Gained experience in test-driven development methodologies, ensuring high-quality software deliverables.

#### Software Developer at RailVision Analytics

September 2020 - June 2021

- Close work with core server architecture and APIs used in the data processing pipeline.
- Kev role in the migration to AWS.

#### Teaching, tutoring and mentoring

September 2019 - June 2023

- Regular appointments as a teaching assistant at McGill and EPFL.
- Certified kitesurfing instructor (IKO), with experience teaching in Sicily.

### Summer internship at CN Rail

May 2019 - August 2019

- Contributed to the winning team of the I&T Business Case competition, targeted at developing a technology-based business solution for CN. Received C\$1200 scholarship as part of the winnings.

#### EDUCATION

**EPFL** - MSc in Computer Science

September 2021 - August 2024

– Thesis: "Simulation Security in the Random Oracle Model" – PDF 🔀

(GPA: 5.25/6.0)

(GPA: 3.87/4.0)

- Supervised by Alessandro Chiesa and Giacomo Fenzi.

McGill University - BSc in Mathematics & Computer Science

September 2017 - April 2021

Minor in Musical Science & Technology.

- Exchange semester at UBC Vancouver (January-April 2020).

### Research Projects and Publications

### Tight inapproximability of well-supported Nash equilibria in public goods games

2023

- with Alexandros Hollender - ipl.2024.106486 arXiv:2402.14198 □

- Obtained hardness results for computing approximate equilibrium points in public goods games, significantly improving the previous upper bound. Completed at THL5, EPFL.

## Integer Programming with Complete Constraint Matrices Report 💆

2022

- Master's Semester Project Supervised by Alexandra Lassota, DISOPT, EPFL.

### Academic Projects

### BobbyChain: Smart Contracts using PoW and pBFT Report 2 - Presentation

2022

- Implemented an array of functionalities of "Peerster", a gossip-based peer-to-peer application.
- Built smart contracts on top of a generic consensus interface, along with two consensus algorithms, which can be used interchangeably: Proof-of-Work and practical Byzantine Fault Tolerance.

#### Broadcast Algorithms Course in

2021

- Implemented in Java the necessary building blocks for a functioning distributed system including *Perfect* Links, FIFO Broadcast and Localized Causal Broadcast.
- Completed as part of the *Distributed Algorithms* course at EPFL.

### Skills and Interests

Rust, C/C++, Java, Python, Go, Git, LATEX, Bash. Technologies

Languages Fluent: English, French and Polish. Learning: German and Italian.

Interests Theory of Computation, Software Development, Probabilistic Proof Systems, Zero-

Knowledge, Music, Kitesurfing, Skiing.