

# Konrad Dryja

SITE RELIABILITY ENGINEER · SYSTEMS ENGINEER

Zürich, Switzerland

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## Personal Profile

Senior Site Reliability Engineer with extensive experience in designing large scale reliable systems, monitoring and productionization of the platforms - including deep understanding of containerised deployment, load balancing and languages like Go and Java. Experienced with running, deploying and monitoring LLMs. In free time, passionate about home automation and self-hosting.

## Work Experience

### Google Switzerland

Zürich, Switzerland

Senior Site Reliability Engineer, Real Time Communications, Workspace AI

June 2021 - Current

- Hold pager with 5 minute response time for services serving 10s of thousands QPS.
- Driven the improvements of the architecture of the platform by sharding the production deployment, greatly reducing blast radius of outages.
- Designed and implemented an off-net SMS monitoring platform, which improved the reliability and monitoring capabilities of SMS infrastructure at Google.
- Created a novel solution of deploying Large Language Models in a fast, but at the same time safe & gradual manner.
- Innovate and lead in the reliability for LLMs space, focusing on their safe rollouts.
- Part of group of experts ensuring consistent and maintainable style of Go in Google's Codebase.

### Google London

London, United Kingdom

Corporate Operations Engineer

May 2020 - June 2021

- Drive infrastructure improvements at Google by designing processes that allow to automate manual maintenance and support tasks.
- Design a self-healing tool proactively repairing network infrastructure of network equipment, saving 100s of hours of engineering time daily.

### University of Aberdeen

Aberdeen, United Kingdom

Research Assistant

Sept 2019 - May 2020

- Worked as Teaching Assistant leading labs about Data Structures, Operating Systems, Artificial Intelligence.
- Collaborate with Computing Science Department on research in IoT and Web3 space, publishing two articles in renown journals.

## Skills

<b>Programming</b>	Go, Bash, Java, Python, SQL, JavaScript/TypeScript.
<b>Systems Design</b>	Large Scale System Design, MLOps, Load Balancing, Monitoring & Alerting Principles, Incident Management.
<b>LoRA</b>	Hyperledger Fabric, Ethereum, Ganache, Smart Contracts.
<b>Linux</b>	Docker, Shell (Bash/Zsh), Deployment Automation (Puppet, Ansible), Git.
<b>IoT</b>	MQTT Protocol (Mosquitto, Moquette), Zigbee, LoRaWAN.

## Education

### University of Aberdeen

Aberdeen, United Kingdom

MSci in Computing Science with Industrial Placement

Sept 2015 - May 2020

- Graduated with 1st class Honours, GPA 19.3 / 22
- Completed 1.5-year work placement in Google Switzerland as Corporate Operations Engineering Intern
- **Courses:** Security, Computational Intelligence, Data Structures & Algorithms, Robotics, Knowledge Based Systems

## Publications

FlyTrap: A Blockchain-based Proxy for Authorisation and Audit of MQTT Connections

Konrad Dryja, Milan Markovic, Peter Edwards

2021 8th International Conference on Internet of Things: Systems, Management and Security (IOTSMS), 2021

Integrating Internet of things, Provenance, and blockchain to Enhance trust in Last mile food Deliveries

Milan Markovic, Naomi Jacobs, Konrad Dryja, Peter Edwards, Norval JC Strachan

Frontiers in Sustainable Food Systems 4 (2020) p. 563424. Frontiers Media SA, 2020

## Achievements

2021	<b>Google Tech Impact Award</b>	Switzerland
2020	<b>Young Software Engineer of the Year 2020 - ScotlandIS</b>	Edinburgh
2018	<b>Intelligent Plant - The Inform Prize</b>	Aberdeen