# WILLEM OLDING PhD, BEng (hons)

### PERSONAL INFORMATION

location Tasmania, Australia

email willemolding@gmail.com

*phone* +61 457040490

GitHub github.com/willemolding/

LinkedIn www.linkedin.com/in/willem-olding

# WORK EXPERIENCE

2020-ongoing Solutions Engineer and Rust Developer

ChainSafe Systems ChainSafe is a leading blockchain R&D company based in Toronta, Canada. As a Solutions Engineer I design cryptography and blockchain based solutions for

clients. I also work as a Rust developer, primarily on the implementation of the Mina protocol.

Freelance Rust/JS Developer and Researcher

RAIR Inc. RAIR is a distributed media streaming and digital ownership protocol. I was contracted to design the fundamentals of the protocol itself and to develop a

proof of concept implementation.

Orion Protocol Orion is a distributed exchange and liquidity aggregator. I was contracted to do

an experimental port of their Ethereum smart contracts to Rust/WASM,

targeting the Elrond blockchain.

2020 Lead Software Developer, REDGRID

RedGrid is an energy IoT company that aims to reduce household energy consumption by adding sensors and controllers to household appliances. As

the lead developer, in addition to writing code I was responsible for task

assignment, deployment and managing the CI/CD pipelines.

2018–2020 Rust Developer, Holo.Host

Holo.Host is a distributed web startup that maintains the open source

Holochain protocol. This is a distributed alternative to a server/database in a traditional web application. I began with Holo through their internship program and was hired to work on on the core protocol team as a Rust

developer.

2015-2020 Lecturer, University of Tasmania/Shandong

University of Science and Technology

University of I authored and co-taught 3rd year level courses in cryptography and communication systems. Additionally as part of a lecture exchange program I

taught digital communication systems to students in China.

# EDUCATION

2014-2019 University of Tasmania

Doctor of Philosophy

School: Engineering and ICT

Thesis: Probabilistic Methods for Land Cover Change Detection

Description: This thesis explored methods for detecting changes and disturbances in parcels of land from time series of low resolution satellite

imagery.

Advisors: Prof. J.C Olivier & Dr. Brian Salmon

2010-2013 University of Tasmania

Bachelor of Engineering (Hons) - Computer Systems First class · School: Engineering and ICT

Thesis: Applying Bayesian Networks to Error Correction Codes

Description: This engineering specialization was a combination of engineering and computing units. Honors research investigated methods to implement

error correction codes for digital communication.

### **TECHNOLOGIES**

Languages Rust, Solidity, Javascript, Python, C

Frameworks Node, Express, React, GraphQL, PyData stack

Other Git/GitHub, Docker, Linux, Latex

# AWARDS

2022 · Winner (top 10) of EthGlobal Hackathon in Bogota

2014 · Dr Sergio Giudici Hydro Tasmania Elite Research Scholarship

2014 · Sir Allan Knight Medal for best fourth year engineering honors project

 $2013\,\cdot\,$  Robert and Roy Horsdall Bursary for best third year Engineering student

November 5, 2022