# Thomas Hill Almeida



tommoa256@gmail.com



+61 487 897 878



tommoa



blog.tommoa.me



# **Projects**

#### relibc | Maintainer

- C standard library written entirely in Rust
- wrote the stdio.h implementation

#### small | Author

- stack-based string implementation in **Rust**
- usage in ion shell increased performance by 30%

### process memory injector | Author

• library for manipulating the memory of other processes in Rust

# Experience

# University of Western Australia | unit tutor

February 2020 - June 2020

• tutored 30 students in data structures and algorithms using Java under Prof. Amitava Datta

#### Arista Networks | software engineering intern

Supervisor: Alex Webster (Technical Lead) | November 2019 - February 2020

- created a custom Linux image using Yocto for network enabled bootable USB drives
  - reduced theoretical fix-time for devices affected by corrupted images by approximately 1 day
  - reduced theoretical regression test time by 10 minutes
- developed tools in **Python** to search for vulnerabilities in Arista operating systems
  - opened approximately 1500 bugs to be triaged

#### Arista Networks | software engineering intern

Supervisor: Alex Webster (Technical Lead) | January 2019 - February 2019

• developed tools in **Python** to discover layer 1 network topology, allowing for previously impossible topology analysis

## Education

#### Masters | Software Engineering

University of Western Australia | 2019-Nov 2020

- GPA: 5.6
- WAM: 72.4%

Software Design Project 90% Testing and Quality Assurance Distinction Computational Modelling Distinction

#### **BSc Software Engineering**

University of Western Australia | 2017–2019

- GPA: 5.5
- WAM: 70%

Data Structures and Algorithms	89%
Networks and Security	91%
Digital Embedded Systems	91%
High Performance Computing	Distinction

# Other

• UWA Programming Competitions Society

vice president 2019 - 2020 secretary 2020 - Present 2018 - Present committee member lecturer 2017 - Present competitor 2017 - Present

• University Computer Club

2019 - 2020 treasurer vice president | 2018 - 2019

- researched and developed methods in **Python** for creating network-accessible USB boot drives to reduce testing time
- - Divisionals finalist 2019
  - Divisionals finalist 2018
  - Divisionals finalist 2017

#### Talis Consultants | undergraduate technician

Manager: Granger Bennett (Noise Section Leader) | 2016 - 2018

- developed noise management solution Nexus in C#
  - in use by Fortescue Metals Group, Alcoa and others in daily operations

#### Music

- Audition choirs
  - The Winthrop Singers

bass section | 2017 - Present

- West Australian Chamber Choir bass section leader | 2019 - 2020

References available upon request