Thomas Hill Almeida

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Projects

relibc | Maintainer
- C standard library written entirely in Rust
- wrote the `stdio.h` implementation
- 4th largest contributor to date

small | Author & Inventor
- stack-based string implementation in Rust
- usage in **ion shell** increased performance by **30%**

process memory injector | Author & Inventor
- 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 │ 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 │ January 2019 – February 2019
- developed tools in **Python** to discover layer 1 network topology, allowing for previously impossible topology analysis
- researched and developed methods in **Python** for creating network-accessible USB boot drives to reduce testing time

Talis Consultants | undergraduate technician
Manager: Granger Bennett │ 2016 – 2018
- developed noise management solution *Nexus* in **C#**
  - in use by Fortescue Metals Group, Alcoa and others in daily operations

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

Computers
- UWA Programming Competitions Society

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

- University Computer Club

treasurer	2019 – 2020
vice president	2018 – 2019

- ICPC
  - Divisionals finalist 2019
  - Divisionals finalist 2018
  - Divisionals finalist 2017

Music
- Audition choirs
  - The Winthrop Singers
    - bass section │ 2017 – Present
  - West Australian Chamber Choir
    - bass section leader │ 2019 – 2020

References available upon request