

**Interim Report:**

**Developing Device Drivers in Rust**

Kyle Christie

B00415210

School of Computing, Engineering

and Physical Sciences

BSc (Honours) Computing Science

University of the West of Scotland

Supervisor: Paul Keir

Moderator: Stephen Devine

**Table of Contents**

[1. Overview 3](#__RefHeading___Toc536_280035510)

[2. Literature Review 3](#__RefHeading___Toc538_280035510)

[2.1 Rust 3](#__RefHeading___Toc540_280035510)

[2.2 Memory Safety and Vulnerabilities 3](#__RefHeading___Toc542_280035510)

[2.3 Previous works 3](#__RefHeading___Toc544_280035510)

[2.3.1 Apple restructures Kernel extensions 3](#__RefHeading___Toc546_280035510)

[2.3.2 Driver Frameworks 3](#__RefHeading___Toc548_280035510)

[3. Preliminary Work 3](#__RefHeading___Toc550_280035510)

[4. Current progress and Future work 3](#__RefHeading___Toc552_280035510)

[References 3](#__RefHeading___Toc554_280035510)

# 1. Overview

# 2. Literature Review

## 2.1 Rust

## 2.2 Memory Safety and Vulnerabilities

## 2.3 Previous works

### 2.3.1 Apple restructures Kernel extensions

### 2.3.2 Driver Frameworks

# 3. Preliminary Work

# 4. Current progress and Future work

# References