UBlock: Distracting App Redirector
(Technical Report)

How Social Media Companies, Device Manufacturers, and Parents Are
Responding to Excessive Device Use Amongst Young Americans
(Sociotechnical Research Paper)

An Undergraduate Thesis Portfolio
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by

Nicholas Gamolin

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Preface

What is contributing to excessive screen times amongst young Americans, and what can be done to reduce problematic usage?

How can software be used to reduce screen time on mobile devices? Many young Americans believe they spend too much time on smartphones. On iPhone, Apple provides Screen Time and other third-party apps via the AppStore that enable users to set time limits on apps - however, existing solutions are unsatisfactory due to little friction and easy workarounds. This technical capstone set out to design and implement a more effective iPhone application that reduces users' overall screen time. Using Apple's IDE (Xcode & SwiftUI) and Screen Time API, a minimum viable product (UBlock) was developed allowing users to select distracting apps, block them during specified hours, and record productive alternatives. This project serves as an important step towards a much larger and more sophisticated tool, and its successful development means it can now be distributed and used by users to reduce their screen times.

How are social media companies, device manufacturers, and parents responding to the problem of excessive screen time among American children? All claim that they value users' wellbeing; tools and techniques to protect the wellbeing of children, however, have drawn criticism as ineffective. TikTok and Meta are purposefully supplying ineffective tools to their users. Apple has not fixed its own broken instruments. Parents either cannot or will not monitor their children. As a result, children continue to be subject to excessive screen time, at a high cost to their wellbeing.

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