Dermot O'Brien
Software Developer & Entrepreneur

Profile

Ambitious. I have always had a strong passion for technology and software, in particular security, privacy and whitehat hacking. 3rd year CS and Business, Trinity College Dublin

Experience

Founder & CTO at Fonz Music
July 2019 – present

Through use of NFC technology, a group of people can unanimously control music queue sessions via Spotify, Apple Music, Amazon Music and more! https://fonzmusic.com

Key responsibilities:
- Oversight of all tech stacks (*API, Website, Admin, Apps for iOS & Android*)
- API development (*ExpressJS, MySQL, Socket.io, TypeORM*)
- Management & Deployment on AWS (*EC2, RDS, AMI & Docker, VPC*)
- Web Development (*VueJS*)
- NFC product R&D

Software Engineer at Orange Tribes
Jan 2021 – present

Working with a software development team in Orange Tribes to develop mobile and backend software for YooChef.

Key responsibilities:
- Development of cross-platform mobile app (*Flutter, Firebase*)
- Backend API and infrastructure (*ExpressJS, Firestore NoSQL*)
- UX & UI Design

Education

Computer Science and Business at Trinity College Dublin
2019 – 2023

Average grade: 1.1 First Class Honours to date

CS Modules: Algorithms & Data Structures, Intermediate Programming, Computer Networks, Computing, Mathematics, Information Management

BU Modules: Organisational Behaviour, Investments, Alternative Investments, Finance

Innovation and Entrepreneurship at Trinity College Dublin
2020 – 2021
Grade: 1.1 First Class Honours

Achieved position on supplemental level 7 degree funded by Bank of Ireland with Trinity's Idea Workspace: Tangent

Projects

TikTok API – Reverse Enginerring Private API
https://github.com/mangledbottles/Musically-API

Reverse engineered the private iOS API for popular social media video app TikTok (formerly Musical.ly). This was done by intercepting requests (Man-in-the-middle attack) with Charles Proxy, disabling the SSL Certification and SSL Certificiate Un-pinning to view requests and responses in plain text. This project is open-sourced on my Github.

End-to-End Encryption Screen Capture
https://github.com/mangledbottles/Screencapture-Encrypted

Open-source project to create a secure place to store and share screenshot captures. When COVID-19 forced everyone to work from home, many businesses began communications entirely online. Confidential documents, credit card information and private memos are shared via screen captures, many online services place these uploads publically. This open-souce project aims to solve that issue.

Connect on LinkedIn

Checkout my Github

+353 87 644 0034
Dublin, Ireland

contact@dermotobrien.me
https://dermotobrien.me

PGP Email Encryption Fingerprint
E0F8 EF85 249D FC62 C11C
7EC6 C4AE 4A3B 52D3 100C

Skills

Programming:

Typescript, NodeJS, ReactJS, VueJS, C, C++, Go, Java, JS, Flutter, PHP

Technologies:

Arch Linux, SQL (MySQL, PostgreSQL), NoSQL (Firestore, MongoDB), REST APIs, Socket APIs

Management:

AWS EC2, RDS, AMI, DNS, Github, Docker

Achievements:

- Grade 1.1 in 1st year and 2nd year of CS and Business

- Completed Citadel Securities Dataton in London, working in a team to analyse large datasets (20m+)

- Emergency First Responder and Cardiac Responder with St John Ambulance

Certificates

- Advanced C Programming

- Functional Programming with JavaScript ES5

- Master Javascript

- Building RESTful APIs with Node.js and Express

- DELF B1 (Diplôme d'études en langue française)