## EMPLOYMENT

School of Engineering IT Team Intern 2019 • Created a highly configurable and robust Vue component used for many database management related internal applications for the University of Edinburgh IT Team. Vue. REST API

TrapIt Freelance Website Design 2018 • Delivered a blog-like page with post creation and editing for YouTube channel and Label owner of TrapIt. React, Firebase

Viola da Gamba Society Freelance Website Design 2016 • Delivered a complete redesign of the old VdGS website with a new framework for the web administrator to continue development in the future. vdgs.org.uk Javascript, PHP

Oxford University IT Services Intern 2015 • Created a simulation for how sound bounces around inside a 2D room using a novel agent-based language. NetLogo

## EDUCATION

Computer Science BEng Hons (First) University of Edinburgh

**Dissertation** • Optimisations in deep learning methods for Jazz chord generation. Python, PyTorch

## PROJECTS

Noxive • My electronic music production hobby ongoing since 2014 with over 500,000 views across all platforms. The official website has a built-in music player to showcase my discography. noxive.com Vue, Firebase

Chess Robot Group Project • Lead a software team of 5 to develop a robot capable of playing chess on a physical chess board. Our team won second place in an Össur competition out of 22 groups. Python, PyTorch

Superchess • Created a multiplayer web game based on chess but with more pieces and a configurable setup. Features a challenging AI with multiple levels of difficulty. *superchessgame.herokuapp.com* React. Websockets. Heroku

Genetica • Co-created a mobile game about genetic modification and galactic domination. Find the perfect combination of attributes for your species and watch them dominate one planet after another. Unity, C#

Owme • Created a web app to help track the debts within groups of friends with PayPal integration, used extensively by my flatmates and me. Javascript, PHP

House Music Generator • Created a windows app capable of generating a section of music complete with drums, melodies, and chords. C#

Encryption-secure Chat • Cretaed a real-time, AES-encrypted web messaging app with self-deleting messages. chat-secure.herokuapp.com React, Websockets, Heroku

Alarm Timer • Created a novel interface to setting alarms and timers on Android. Android, Java

Ultrasound Transceiver • Co-created an app capable of sending and receiving small amounts of data between everyday mobile devices over ultrasound. Created during a 24h CreatED hack. Java