

## Work Experience

### Cydar Ltd / Full Stack Intern

June 2018 - present / 10 weeks total

I am currently an intern at Cydar Ltd, they make imaging software for aiding keyhole surgery. I am making a monitoring web app, using React and Typescript for the front end and Tornado and Redis for the back end.

### Musical

2 Years as a piano accompanist for a local choir.

1 Year as a pianist in a care home.

## Projects

### Monitoring Web App for Cydar

The web app displays a feed of notification messages, colour-coded by importance and filterable by a number of attributes. It utilises responsive design to work on phones and tablets. Message history can be accessed by scrolling up, using Redis on the server side. The front-end is styled using Sass and built with React, using Typescript to aid development.

### Android Apps

To better understand object-oriented programming, I used Java to make two android games. They are both available on the Play Store and are called 'Jazz Dash' and 'Snazzy Snake'. They were made using LibGDX, a framework which allows you to deploy your Java-coded game to a variety of platforms.

### Markov Chains

I experimented with using Markov chains for text generation in the style of any particular corpus. When fed a large amount of wine-tasting notes, the Markov-generated texts gave some interestingly believable tasting notes.

*"There's a slight herbal quality that recalls beef jerky and bacon."*

### Chess Bot

A Chess bot in Java using the Minimax algorithm alpha-beta pruning.

## Education

### King's College Cambridge

Computer Science

Year 1 (2:1)

Expected Graduation: 2020

### Colyton Grammar School

A Levels:

Maths A\*, Further Maths A\*, Physics A\*

GCSEs:

8 A\*s 4 As

## Skills

### Java

Taught at university, I have used it for most of my projects and extra-curricular coding.

### ML

The functional language, taught at university.

### Python

Self-taught, used in my internship at Cydar as well as for hobby coding. Experience with Tornado during my internship, limited experience with data science tools e.g. numpy, scipy.

### HTML, CSS, Javascript, Typescript, React, Redis

Self-taught, used in my internship at Cydar and to make my website.

## Extra-curricular

### Electronics

At Colyton Grammar School I led the electronics club, teaching children how to make audio amplifiers. I have used microcontrollers to build musical controllers.

### Music

I have Grade 8 in both piano and violin. I combined my interests in music and electronics by building an electric violin. I currently play keyboard in a funk band for large events.