

SOFTWARE ENGINE

□ (+44) 774-328-7831 | ☑ mohkalex@gmail.com | 🏕 kisara.moe/r/upwork | ☑ mohkale | ❖ mohkale | ቬ mohkale

### Education

### The University of Sheffield

Broomhall, Sheffield

BSc Computer Science and Artificial Intelligence, First Class Honours

Mar. 2018 - June. 2021

### **Thomas Rotherham College**

Moorgate rd., Rotherham

Aug. 2016 - Jun. 2018

Mathematics (A), Computer Science (A), Physics (B)

### Skills

A LEVELS (2A + B)

Languages JavaScript, TypeScript, CSS, SCSS, Python, Java, C#, Ruby, Go

Frameworks React, Vue, JQuery, Django, ExpressJS, Sinatra, Flask, MaterialJS (Vuetify), Swing, Scrapy

## Projects\_\_\_\_\_

### Puddle github.com/mohkale/puddle

A DASHBOARD FOR MANAGING TORRENTS USING MODERN WEB STANDARDS

- Designed a React based frontend. Applying functional components and using Redux stores to optimize page responsiveness and re-rendering speed.
- Interfaced with an ExpressJS backend through a RESTful API. Incorporating type safe interfaces to guarantee the structure of frontend requests and backend responses at compile time.
- Optimized to be able to display over 200 concurrently downloading torrents with no noticeable UI lag.
- Persisted notification history in a NoSQL database. Creating API endpoints and UI components to connect and retrieve history on demand.
- Built fully automated CI/CD pipelines, through GitHub Actions, to automatically perform regression tests and release deployments.

#### Twaxi-Admin

FULLSTACK MANAGEMENT APPLICATION FOR A TWITTER BASED TAXI SERVICE

- Collaborated with a team of 6 others in an Agile environment, taking a leading role in team organisation, supervision and task allocation.
- Developed scripts to automate content generation and deployments. Also assisting in a supporting capacity with other teammates, helping work through environment issues and feature bugs.
- Lead development on the backend twitter connection, including an asynchronous update system to automatically read in new tweets and keep the frontend and backend states in sync.
- Optimized storage of tweets in the Sqlite database using a recursively defined relationship between records.

### **Publisher Management System**

Cross platform publisher management system with Swing based  $\mathsf{GUI}$ 

- Identified key features and story cards from an abstract description of the publisher's business and the expected features for the system.
- Directed a team of three other developers through an Agile development plan, with implementation sprints lasting 2 weeks and progress meetings twice a week.
- Designed and implemented the schema for the MySQL database from the story cards. This included creating a rudimentary Data Access Object system which mapped Java classes to database tables and Java objects to database records.
- Spearheaded development on core interface features for the system. Including creating and implementing logic for the login, registration, and journal management views.

# Professional Experience \_\_\_\_\_

Upwork (remote)

FreeLance Developer Oct. 2018 - Present

- Designed a web scraper, using Scrapy, to automatically read company names from an Excel document and then find and populate related information from a listing site. Successfully ran at a rate of 4 URLs per minute and managed to fill out information for over 7000 companies in under 2 days.
- · Taught programming concepts to students using Python and Flask, while organising lesson plans and suggesting project ideas.
- Implemented a Selenium based web-scraper to extract dynamically loaded content from an Angular web app. Involved automating interaction with webforms and using the nonoCAPTCHA library to attempt to bypass Captchas.

JULY 16, 2021 MOHSIN KALEEM · RÉSUMÉ 1