

Muhammad Hamza Shezad

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Work Experience

Maxx Sports TV, Inc.

Remote (USA)

Software Developer

Oct. 2021–Jan. 2023

- Led the development of a multi-user content management dashboard using React.js and Material UI in Typescript
- Followed Test Driven Development best practices to increase maintainability for critical components of the dashboard, such as the video upload service
- Wrote end-to-end tests using Cypress to test the customer-facing website, ensuring critical user interactions stay consistent
- Authored a content management (CMS) backend in Golang and MySQL
- Developed custom scripts in Golang to automate tasks saving about an hour per live stream and 20% reduction in labour costs
- Completed independent projects with B2C and B2B scopes and coordinating with the manager on deadlines and user requirement collection

Shopistan

Lahore, Pakistan

Software Developer Intern

Jul. 2019–Aug. 2019

- Explored different strategies to automate data collection from POS printers
- Created an Electron.js application that acts as a virtual printer, with a Vue.js front-end
- Reduced labour costs up to 50% with the help of automation of data acquisition
- Improved accuracy of data collection by 40% and efficiency of the overall system
- Documented the software to allow easy on-boarding for future engineers

Education

Queen Mary, University of London

London, UK

Bachelors of Science in Computer Science (Honours)

Sep. 2018–Jun. 2021

Achieved: *Upper Second Class (2.1)*

Final Year Project: *"Studying user interfaces of group chat platforms"*

Projects

E-commerce Website Project

Jun. 2021–Present

- Built an e-commerce website on Next.js with a serverless architecture using AWS Amplify
- Incorporated AWS for hosting, and Amazon Cognito for user account management
- Created Typescript Lambda functions to handle business logic
- Designed GraphQL schema in Amazon AppSync with specific authorisation rules to restrict access to data

Queen Mary, University of London

Sep. 2020–May 2021

Final Year Project: *"Studying user interfaces of group chat platforms"*

- Analysed conversation threads from different group chat platforms to uncover repeated content that diminished readability across all platforms, finding many instances of repetition for quote-replying threads
- Synthesized research findings into concise framework to derive key insights and recommend solutions, resulting in a decrease in manual scrolling time
- Developed a new group chat platform using websockets and NoSQL databases, incorporating research findings
- Executed controlled user testing to measure technical and design performance of interface, attaining a 75% success rate on user satisfaction surveys
- Demonstrated strong technical skills in web development and proficiency in JavaScript
- Presented the chat platform and research findings in a final project report, showcasing analytical and writing skills

Queen Mary, University of London

Sep. 2020–Dec. 2020

Ethereum Blockchain Analysis

- Processed over 650 GB of data of Ethereum blockchain using the MapReduce programming model with Apache Spark (pyspark) and Apache Hadoop (mrjob) in Python
- Analysed the data to understand different aspects of the blockchain, such as the effects of the gas prices on the price of Ether
- Presented reports visualising data using matplotlib